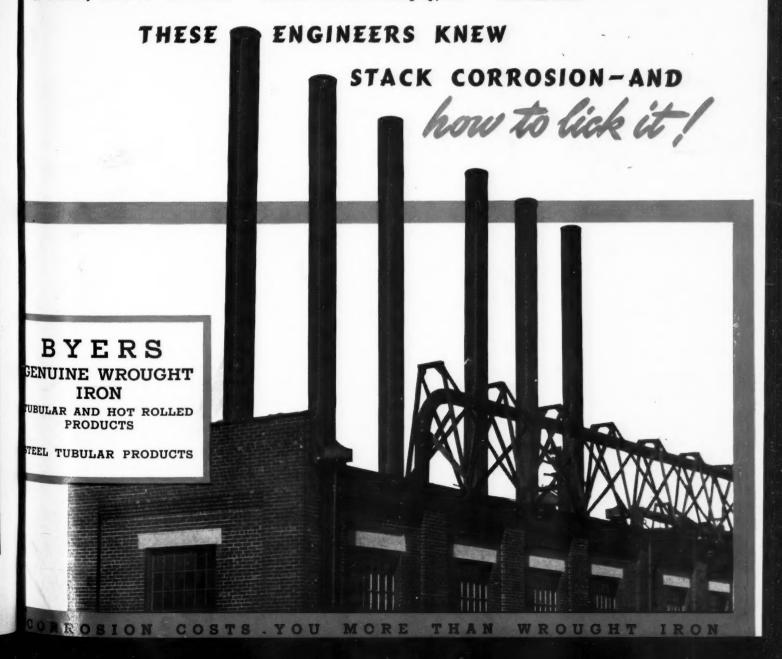
Railroad men know—from first-hand experience—what smoke corrosion is, and how to combat it. In building these six 30" x 50' stacks at the Boston Fruit Terminal, the New York, New Haven and Hartford Railroad Company used Byers Wrought Iron.

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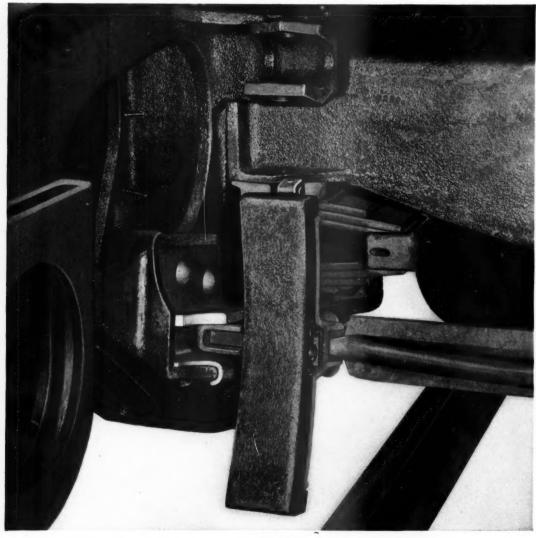
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Published every Saturday by the Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa., with editorial and executive offices: 30 Church Street, New York, N. Y., and 105 West Adams Street, Chicago, Ill.

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The Railway Age is a member of the Associated Business Papers (A. B. P.) and of the Audit Bureau of Circulations (A. B. C.)

Subscriptions, including 52 regular weekly issues, and special daily editions published from time to time in New York, or in places other than New York, payable in advance and postage free. United States, U. S. possessions and Canada: 1 year, \$6.00; 2 years, \$10.00; foreign countries, not including daily editions: 1 year, \$8.00; 2 years, \$14.00.

Single copies, 25 cents each.

H. E. McCandless, Circulation Manager, 30 Church St., New York, N. Y.

Railway Age

With which are incorporated the Railway Review, the Railroad Gazette and the Railway Age-Gazette. Name registered U. S. Patent Office.

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RAILWAY AGE

Railway Labor Costs and Financial Results

The pending wage controversy, which involves the most railway costs of any in history, has now passed through the stages of collective bargaining, government mediation, and hearings by an emergency fact-finding board appointed by the President. It remains only for this board to make its report and recommendations to the President, and for the railways and labor unions to decide whether they will accept its recommendations. Neither side is required by the Railway Labor Act to accept them. The railways doubtless will. Under the present administration, and under existing conditions, they have virtually no alternative. Probably the labor unions will accept them, also. The Railway Labor Act relies on public sentiment to enforce the recommendations of such a board. Public sentiment toward labor unions generally, including the railway unions, is now far from friendly. Nobody doubts that the board will recommend advances in wages; and for the unions, in present circumstances, and in view of the already high wages of most classes of railway employees, to refuse the advances recommended, would hardly be helpful to their cause in future.

An Educational Case for R. R. Negotiators

The cases of both the railways and their employees have been as fully and ably presented as the circumstances permitted. But, whether or not all that has occurred has been educational to those who have represented the employees, it has been highly educational to most or all of those who have represented the railways. The Railway Labor Act requires, first, direct negotiations; if these fail, mediation by the government mediation board; and if this fails, a proposal of arbitration by the mediation board. In case of arbitration the award must be accepted. But, while the railways consented to arbitration under the Railway Labor Act, the labor unions rejected it; consequently, the controversy went to the emergency board appointed by the President—to which it seemed headed all the time, because apparently that was where both parties wantedit to go.

The representatives of the railways wanted it to go there because they did not wish to assume the responsi-

bility, as they did in 1937, of agreeing to advances which the labor unions would accept. The labor unions apparently wanted it to go there because they believed a board appointed by the President would recommend larger advances than the representatives of the railways would grant excepting on the recommendation of such a board. This statement is not intended as a comment on the board actually appointed. It is only fair to say now, before its recommendations have been made, that it is composed of men of great intelligence whose bearing throughout the hearings was wholly fair and judicial. Nevertheless, after having refused arbitration under the Railway Labor Act, the unions also declined a request by the President to let the board appointed by him arbitrate the dispute, preferring to retain their power to strike.

Railroads Need an Improved Method

What the controversy has shown again, regardless of its outcome, is the inadequacy of the present organization and methods of the railway industry for dealing with its labor problem. That they are inadequate is not the opinion of the *Railway Age* alone, but also the opinion of most, if not all, of the men who have represented the railways as members of conference committees, as counsel and as labor, statistical and public relations experts; and the record of what has occurred during the last thirty years supports their consensus of opinion.

We give in a table herewith statistics showing the return earned for investors in the railways, and the return paid employees for their work, throughout the last thirty years. We have added estimates for 1941 based on present wages, and also on wages advanced an average of 41 per cent, as now demanded by the unions.

Average investment per employee usually increased throughout the thirty years excepting during and immediately following the last war period. It increased with accelerated rapidity during the depression until 1939, because during the depression total investment increased hardly at all, while, owing to the great declines of traffic and earnings, the number of employees

was sharply reduced. Even prior to our entrance in the first world war the trend of return earned on investment was turning downward, while between 1911 and 1917 the average annual wage increased 37.5 per cent. The return earned for investors was maintained then as well as it was, in spite of the large advance in the average wage, because traffic units produced per than ever before, excepting in 1917 and 1918. But labor costs per 1,000 traffic units were still \$5.70 in 1923, or 68 per cent higher than in 1917; and, although freight and passenger rates were higher than before the war, the return on investment was only 4.42 per

During the decade ending with 1930 the total invest-

			Railway F	inanci	al Results	and La	abor Cost	s, 1911-	1941	- 1		
Year	Employees	1911 = 100	Average Invest. per Employee	1911 = 100	Per cent Return on Investment	1911 = 100	Average Annual Wage	1911 = 100	Traffic Units per Employee	1911 = 100	Labor Costs per 1,000 Traf. Units	1911 = 100
1911	1.599,854	100.0	\$9,356	100.0	4.84	100.0	\$730	100.0	216,868	100.0	\$3.37	100.0
1912	1,642,119	102.6	9,325	99.7	4.63	95.7	737	101.0	217,362	100.2	3.39	100.6
1913	1,759,020	109.0	9,067	96.9	4.94	102.1	761	104.2	227,029	104.7	3.35	99.4
1914	1,640,029	102.5	10,065	107.6	4.00	82.6	815	111.6	236,963	109.3	3.44	102.1
1915	1,491,849	93.3	11,265	120.4	4.06	83.9	829	113.6	247,533	114.1	3.35	99.4
1916	1,647,097	103.0	10,708	114.4	5.90	121.9	892	122.2	283,045	130.5	2.93	86.9
1917	1,732,876	108.3	10,738	114.8	5.02	103.7	1,004	137.5	295,978	136.5	3.39	100.6
1918	1,841,575	115.1	10,425	111.4	3.33	68.8	1,419	194.4	289,648	133.6	4.90 5.76	145.4
1919	1,913,422	119.6	10,199	109.0	2.33	48.1	1,486	203.6	257,846	118.9 125.6	6.68	170.9 198.2
1920	2,022,832	126.4	9,979	106.7	0.09 2.91	1.9 60.1	1,820 1,666	249.3 228.2	272,317 252,350	116.4	6.60	195.8
1921	1,659,513	103.7	12,451	133.1 137.3	3.64	75.2	1,623	222.3	273,965	126.3	5.92	175.7
1922	1,626,834	101.7	12,848	125.1	4.42	91.3	1,617	221.5	283,471	130.7	5.70	169.1
1923	1,857,674	116.1	11,707	137.6	4.32	89.3	1,613	221.0	283,601	130.8	5.69	168.8
1924	1,751,362	109.5	12,873 13,542	144.7	4.75	98.1	1,640	224.7	299,066	137.9	5.48	162.6
4006	1,744,311 1,779,275	111.2	13,652	145.9	4.99	103.1	1,656	226.8	309,215	142.6	5.36	159.1
40.00	1,735,105	108.4	14,308	152.9	4.28	88.4	1,677	229.7	305,381	140.8	5.49	162.9
1927	1,656,411	103.5	15,234	162.8	4.61	95.2	1.706	233.7	318,592	146.9	5.35	159.0
1929	1,660,850	103.8	15,576	166.5	4.81	99,4	1.744	238.9	325,462	150.1	5.36	159.1
1930	1,487,839	93.0	17,715	189.3	3.28	67.8	1.714	234.8	311,790	143.8	5.50	163.2
1931	1,258,719	78.7	20,849	222.8	1.99	41.1	1.664	-227.9	297,849	137.3	5.59	165.9
1932	1.031.703	64.5	25,349	270.9	1.24	25.6	1,466	200.8	276,136	127.3	5.31	157.6
1933	971.196	60.7	26,711	285.5	1.82	37.6	1,445	197.9	307,090	141.6	4.71	139.8
1934	1,007,702	63.0	25,576	273.4	1.78	36.8	1,508	206.6	320,343	147.7	4.71	139.8
1935	994,371	62.2	25,860	276.4	1.93	39.9	1,653	226.4	339,373	156.5	4.87	144.5
1936	1,065,624	66.6	24,216	258.8	2.57	53.1	1,735	237.7	381,476	175.9	4.55	135.0
1937	1,114,663	69.7	23,383	249.9	2.27	46.9	1,839*	251.9	389,865	179.8	4.72	140.1
1938	939,171	58.7	27,743	296.5	1.43	29.5	1,965*	269.2	377,962	174.3	5.20	154.3
1939	987,675	61.7	26,457	282.8	2.25	46.5	1,993*	273.0	406,401	187.4	4.90	145.4
1940	1,026,956	64.2	25,653	274.2	2.61	53.9	2,026*	277.5	432,865	199.6	4.68	138.9
1941†	1,106,032	69.1	23,855	255.0	4.12	85.0	2,088*	286.0	490,339	226.0	4.26	126.4
1941‡	1,106,032	69.1	23,855	255.0	0.07	1.4	2,944*	403.3	490,339	226.0	6.01	178.3
-												

Includes payroll taxes.
Estimated on basis of results in first 8 months of 1941.
Estimated on basis of results in first 8 months of 1941, but including 41 per cent advance in wages demanded.

employee were increased 36.5 per cent between 1911 and 1917-almost in proportion to the increase in the average annual wage.

Government Guaranty Protected Last War's Wage Rise

The pre-war relationship between return on investment and the average annual wage was destroyed, as the statistics show, by government operation and its aftermath. Between 1917 and 1920 the increases in the number of employees and in their average annual wage were so great that traffic units per employee declined 8 per cent; labor costs per 1,000 traffic units increased from \$3.39 to \$6.68, or 97 per cent; and return on investment declined from 5.02 per cent to 0.09 per cent. Only government guarantees of return in 1918-1920 saved the railroad industry from general bankruptcy.

The sharp decline of traffic in 1921 was accompanied by a corresponding reduction of employees; but the relationship between labor costs and return on investment had become so abnormal that in 1921, and again in 1922, the Railroad Labor Board created by the Transportation Act of 1920 authorized reductions of wages. In 1923 there was a large increase in traffic; and, in spite of a large increase also in employees, traffic units per employee increased to a higher level

ment in the railways was increased 51/2 billion dollars; and investment per employee increased from about \$10,000 to \$17,700. The three-fold purposes of this increase in investment were enlargement of capacity, improvement of service and reduction of operating costs, especially labor costs. But soon after the reductions of wages made in 1921 and 1922 they began increasing again with the result that, although in 1930 traffic units per employee were 44 per cent more than in 1911 and 24 per cent more than in 1921, labor costs per 1,000 traffic units were still \$5.50, or 60 per cent more than in 1917, although 17 per cent less than in 1921. Labor costs per 1,000 traffic units in the decade ending with 1930 averaged \$5.65, as compared with only \$3.32 in the seven years preceding government operation, an increase of 70 per cent, while average return on investment in the decade ending with 1930 was only 4.02 as compared with 4.77 in the seven years before government operation.

Wages Have Risen Faster Than Output Per Employee

Thus, in spite of the large increase in investment, and the resulting increase in efficiency of operation shown by the increase in traffic units per employee, the railways had been unable to come anywhere near reducing labor costs to the pre-war level, or-despite higher freight and passenger rates-recovering the pre-war return on investment. During the depression the number of employees was reduced relatively more than the decline of traffic, resulting in the number of traffic units per employee increasing from about 312,000 in 1930 to almost 433,000 in 1940, or 39 per cent; and labor costs per 1,000 traffic units declined from \$5.50 in 1930 to \$4.68 in 1940—including in the labor costs of 1940 the payroll taxes for the retirement fund for employees that the railways have had to pay since 1936.

But this decline of labor costs was deceptive. It was mainly due to retrenchments, especially in maintenance, necessitated by the great decline of traffic and earnings. It was accomplished in spite of the advances in wages made in 1937, as a result of which they have since been the highest in history; and it was far from sufficient to maintain return on investment, which declined in the decade ending with 1940 to an average of 2 per cent—less than half as much as in the decade ending with 1930 and 60 per cent less than in the seven years preceding government operation.

It cannot be said, in view of these facts, that railroad management has been successful during the last two decades, and especially during the last decade, in securing an equitable and constructive division of earnings. between capital and labor. The facts prove the opposite. After all the talk about "co-operation" between the labor unions and management, it did seem reasonable to hope that when increased traffic and gross earnings afforded the industry opportunity to recover its earning capacity, the unions would give it a chance to do so. Even at the rate (4.12 per cent) at which return on investment was earned in the first two-thirds of 1941, it would have been smaller this year than in any but five of the twenty years ending with 1930, exclusive of the period of government wartime guarantees.

Proposed Wage Rise Would Wipe Out Net Earnings

Nevertheless, the labor unions immediately came forward with demands for increasing labor costs 41 per cent. What granting of these demands would do to labor costs, and, consequently, to return on investment, is indicated by the estimates made in the last line of the accompanying table. It would increase labor costs per 1,000 traffic units to \$6.01, or to 78 per cent more than in 1911 and 40 per cent more than in 1930, and reduce return on investment to 0.07 per cent, or virtually nothing at all. Granting of even one-third of the demands would, without any of the large increases in maintenance expenditures needed, increase labor costs per 1,000 traffic units to almost \$4.86 and reduce return on investment to less than 3 per cent. And yet, in spite of the temporary conditions causing the current large increase in earnings; in spite of the need for large increases in maintenance expenditures; in spite of the need for large purchases of equipment; in spite of the need for enlargements and improvements of other railway facilities-no informed person seems

to doubt that a substantial advance in wages will be recommended.

Professionals vs. Amateurs

There seems to be a consensus of opinion among those who have represented the railways in dealing with the labor unions as to why the railways have so regularly been defeated in their efforts to prevent excessive labor costs. On one side are the labor leaders, who have risen to their positions because they are men of ability. They employ competent economists, statisticians and lawyers; and they and their economists, statisticians and lawyers continuously devote all their ability and energy to planning and working to secure more expensive working rules and higher wages. Their "timing" is good; they usually start movements for increasing labor costs when strategically the railways are the most vulnerable. On the other side are railway executives, who, after a labor movement has been started, hastily extemporize committees of able officers to represent management; and these committees as hastily draft economic and statistical experts and lawyers to assist them. But the railway officers, economists, statisticians and counsel selected have been doing their regular work since they last participated in dealing with a labor movement, or have had no experience at all in dealing with such a movement. Consequently, there develops a contest between the professionals representing the labor unions, on the one hand, and the virtual or complete amateurs representing the railways, on the other hand. The results of such contests in the railway field cannot reasonably be expected to differ much from the usual results of contests between professionals and amateurs in other fields.

The responsibility for the adverse results that usually have been suffered by the railways is not that of the amateurs that have been hastily extemporized into temporary organizations. It is that of the chief executives. And the railways will not get better results until railway executives create a permanent organization composed of men of first-rate ability and given as much opportunity as the labor leaders have constantly to study and deal with the labor problems of the industry.

McAdoo Mechanics

In the days of the Railroad Administration during the first World War, it was necessary because of the shortage of skilled labor in the mechanical department of the railroads, to promote helpers with five or more years' experience to mechanics. This prevented their receiving the well-balanced training that is necessary for successful mechanics in a railroad repair shop or enginehouse. Moreover, after these men achieved the status of full-fledged journeymen, little if any concerted effort was made to see that they received additional training along broad lines, although in addition to receiving the mechanics' rate, they were expected to be

given "an opportunity to learn all branches of the trade."

As a result of this some railroad shops are finding themselves in an embarrassing situation in today's emergency. The older mechanics are passing out of the picture and are being succeeded by the "McAdoo mechanics." Because many of these men do not have a sufficiently rounded-out training, and because special jobs can be bid in on a seniority basis, production is being interfered with in some places and the locomotive shop supervision is sorely beset.

Little can be done at the moment to remedy this, but some roads, because of the shortage of trained workers, are again promoting helpers to mechanics. Would it not be advisable, in such instances, deliberately and carefully to plan to continue their training on the job, in order that they may not be handicapped when seniority opens larger opportunities to them in the future? Certainly it would be to the worker's advantage to receive such additional training. Likewise, the railroad would profit in the long run, so that it would seem that some way could be found to work out this problem to the mutual advantage of the men and the management.

While the railroads are doing a capacity business today, the time will come when they will again find themselves in keen competition with other types of carriers. Costs must be kept to a minimum if this competition is to be met successfully. It can only be done by having a force of well-trained employees in all departments.

Post-War Competitive Prospects

The failure of carloadings this fall to attain the seasonal peak foreseen in even the most conservative estimates did not arise, certainly, from any falling off in defense production. On the contrary, such production is steadily increasing. The failure of carloadings to attain the expected peak was a failure of commercial traffic.

Why should commercial traffic have shown this weakness? The leading editorial in our last week's issue suggested some likely answers to that question, among them: (1) the curtailment of inventory accumulation by industry and government agencies and (2) the disruption of commercial production, especially that of small business, by the heavy-handed manner in which the military production program is being carried out.

There occurs to your observer another likely reason why commercial railroad traffic failed to develop the usual seasonal pattern—and that is the enormous growth of truck transportation

enormous growth of truck transportation.

In 1937 when the Federal Reserve Board industrial production index was 113, the railroads originated 1,015,000 thousand tons of revenue freight, but in 1940 when the F. R. B. index had mounted to 123, the carriers originated only 1,009,-000 thousand tons. There has been a considerable increase in loadings this year, but with a starting F. R. B. index of 141 in January that steadily mounted to 161 in September, it does not seem that the railroads have obtained nearly their fair proportion of the increase. (It is not contended here that the F. R. B. index is a wholly satisfactory measure of "potential" traffic, but, on the other hand, as wide a separation between this index and railroad tonnage as has occurred suggests, in the absence of other explanations for the discrepancy, that diversion of traffic away from the railroads to rival transportation agencies must be suspected as a leading contributor to it).

Reports come in from all sides that the trucks are being crowded to handle the business being offered, and that they are turning less-desirable traffic away to the railroads. The I. C. C. report for the first quarter, 1941, would seem to verify this. Tons carried increased 27 per cent and

revenue 26 per cent above 1940, in that quarter, but truck-miles operated increased only 22 per cent. Complete reports are not available for later months but such information as is available indicates that this trend is continuing.

It is our information that the trucks would have handled a greater proportion of the traffic this year if they had had the equipment. This shortage seems to be only temporary and will be overcome with the present rate of truck production. Unless something is done to cause railroad rates to reflect more adequately than in the past the comparative economy of railroad service, further estimates of future carloadings may continue to overshoot the mark.

But railroad management has not been given the opportunity exhaustively to study this situation; and to see whether there are rates which the carriers could profitably apply which would decelerate, or entirely inhibit, the further loss of traffic to competitors. Instead, managers have had to devote their energies to the protracted wage negotiations—studying, meantime, what effect possible wage increases may do to their costs; and how such higher costs can possibly be met.

While the attention of the railroads is thus unavoidably diverted, the truck operators are employing their energies to getting rid of the less-desirable traffic; and especially toward strengthening their hold on profitable tonnage which will continue to move when the present crisis has passed.

The traffic situation which the railroads will face after the present emergency—and the steps which, to be effective, must be taken now to enable them to meet future contingencies—is a question which is parallel in importance to the efficient handling of defense traffic. The continuance of the American way of life may well depend upon the latter, but, in the long run, the continuance of the American way of life also depends upon achieving economy in transportation; and upon the continuation of the railroads in private ownership as a bulwark against the further spread of socialism



One of the Coaches Recently Built by Pullman-Standard

The New York Central Gets 45 Coaches from Pullman-Standard

New cars are notable for simplicity, comfort and the inclusion of all modern convenience features

MPLICITY, comfort and convenience, coupled with pleasing exterior lines and interior appointments feature the 45 new coaches recently built for the New York Central by the Pullman-Standard Car Manufacturing Company. These cars, embodying welded low-alloy, high-tensile steel construction with girder-type side frames, are designed for a high degree of economy in construction, maintenance and operating costs. The cars are being used on the following well-known New York Central trains: Empire State Express, Twilight Limited, Commodore Vanderbilt, Pacemaker and Iroquois.

The new New York Central passenger coach is designed with a coupled length of 84½ ft.; length, center to center of trucks, 59½ ft.; height, rail to roof, 13½ ft., and width over side sill, 10 ft. The car body weighs 81,600 lb., and the two four-wheel trucks, 39,400 lb., or a total of 121,000 lb. The main passenger compartment in the center of the car, slightly over 54½ ft. long, has 28 double rotating reclining seats, spaced at 3 ft. 5½ in. centers, giving a total seating capacity of 56. An 8-ft. women's lounge in one end of the car is equipped with a four-seat sofa, a dressing mirror and table and the usual complement of toilet facilities. The men's room in the other end of the car is 9½ ft. long and includes a two-seat sofa, modern lavatory facilities and two toilets.

The double rotating reclining seats, supplied by the Coach & Car Equipment Company, have foam rubber cushions and folding foot rests. The Massachusetts Mohair plush seat covering is turquoise in color with horizontal stripes. The sofa in the men's lounge, made by Karpen Brothers, embodies spring and hair construction with a reddish-tan leather seat covering. In the women's lounge, the full-length sofa, also furnished by Karpen, has a two-piece seat cushion and frame with one-piece back, the seat covering being blue for the sofa and also for the Karpen dressing chair.

Long mirrors are installed on the toilet entrance doors and wall mirrors at the wash stands in the lounge rooms. On the bulkheads in the main passenger compartment, mirrors are set in 26-in. by 36-in. metal frames. An electric water cooler is installed in the car with the overhead applies weit located above the calling in the

women's lounge and the water-spigot alcove built into the low bulkhead at the women's end of the car.

Colorful Decorative Treatment

The decorative treatment and color schemes for the new N. Y. C. passenger coaches was developed by Henry Dreyfuss. The flooring in the main section has aisles of tan jaspe linoleum with square inlays of rust-colored plain linoleum. The portion of the flooring at the sides under the coach seats is in the plain rust-colored linoleum, of the same color as the inlaid squares in the aisle strip.

An unusual feature of the decorative treatment is the use of linoleum as a wall covering for the bulkheads at either end of the main compartment. The lower or wainscot portion of the bulkhead is done in a tan jaspe pattern linoleum, with the pattern running vertically. The upper portion of the bulkhead is done in a plain type of a



overhead cooling unit located above the ceiling in the Interior Colors Are Rust, Tan, and Gray with Blue-Green Upholstery



A Low Partition Is Placed Opposite the End of Each Corridor—The End Wall Surfaces Are Finished with Linoleum

linoleum, in egg-plant color. Rectangular mirrors are also used on each of the main bulkheads.

The interior paint colors for the main compartment have a wainscoting to match the dark linoleum used on the bulkhead, window piers of rust matching the rust color of the floor, upper side wall and basket rack in gray, with ceilings in light gray.

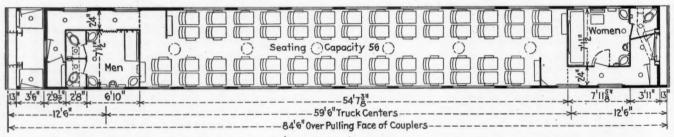
The upholstery fabric is in a blue-green with a hori-

cludes a No. 10 gage pressed member and a rolled angle. The draft sills are a continuation of the center sills and embody built-up welded construction in combination with cast-steel draft-gear stops conforming to A. A. R. specifications. The side skirts are extended at the lower portion of the sides, curving inward to complete the streamline effect and are cut away at the trucks. Hinged sections give access to underneath equipment. The roof sheets are No. 18 gage alloy steel with Z-shape reinforcements welded to the underside.

The flooring is Pullman arch-type, made of galvanized steel with Tuco lightweight floor composition applied over it. The car insulation consists of Fibreglas with latex covering, 3 in. thick in the floor and roof, and $2\frac{1}{2}$ in. thick in the sides and ends.

Draft gears are the Waughmat twin-cushion type, with National A. A. R. tight-lock couplers, having a two-pin universal connection, with cast-steel yokes. Pullman type trap doors operate in conjunction with pivoted retracting steps having Kass ½6-in. stainless-steel treads. The Pullman-Standard vestibule closure arrangement, conforming with the exterior contour of the car body, has anti-rattling supports, bracing attachments, facings, etc., and a center, top and bottom buffer stem with single coil spring. The center and outside diaphragms are made of canvas and stretched rubber, respectively.

The interior finish of the car consists of the following: Wainscoting, $\frac{3}{16}$ -in. tempered Presdwood; pier panels, .048-in. furniture steel; frieze panels and end finish panels, $\frac{3}{16}$ -in. tempered Presdwood; partitions, $\frac{1}{12}$ -in. galvanneal-covered plywood; moldings of chrome-finish steel, snap-on type; ceilings, furniture grade steel. The doors in the car ends are of hollow-type sheet-steel con-



Floor Plan of the New York Central Coaches-Folding Foot Rests Add to the Comfort of the End Seats

zontal line pattern and a texture of cut and uncut mohair.

The window shades are a herringbone pattern with

The window shades are a herringbone pattern with rust coloring. Window capping is black Caf-O-Lite, in a dull finish. All of the bright metal trim on the interior of the car, such as air diffusers, sash frames, longitudinal moldings, etc., is in natural metal, satin-finish. The passageways at either end of the main compartment repeat the same floor, wall and ceiling treatments as used in the main compartment.

The men's room has a floor of rust-colored linoleum, walls of gray, ceiling in rust, recalling the color of the floor, and a seat covering of rust-colored leather. The women's room has a plain linoleum floor covering of rust color, walls of gray, ceilings of light gray, and sofa and chair upholstered in blue leather.

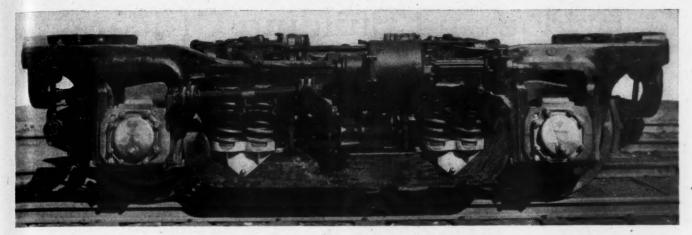
The car frame is of welded girder design, made principally of U.S.S. Cor-Ten steel and sheathed on the outside with the same type of low-alloy high-tensile steel. While relatively light in gage, this side sheathing is maintained straight and true to an unusual degree by means of closely spaced channel stiffeners 3/4 in. deep, welded to the inside surfaces. The center sill comprises two A. A. R. Z-sections, 31.3 lb. per foot, with the top flanges jointed by a continuous weld. Each side sill in-

struction; vestibule doors are made of copper-bearing steel, with Pullman two-part construction. End door locks are of the Dayton Push-Pull type, the end doors also being equipped with Russell & Erwin, semi-concealed door checks with open-holder feature.

Window sash throughout are stationary and consist of Edwards double-glazed dehydrated units, with ¼-in. polished plate glass on the outside and ¼-in. polished laminated glass on the inside. Dayton continuous type basket racks and lighting fixtures in combination are installed, being approximately 18 in. wide and 51½ ft. long on each side of the car. One lighting fixture is located over each seat, individually controlled. The racks have a nose piece of steel, satin-chrome finish, and the balance is painted the same color as the frieze panels.

In conjunction with the general lighting scheme six combination air outlet and lighting fixtures are located in the ceiling spaced symmetrically on the longitudinal center line of the car. These fixtures are arranged with two lamps, one for general illumination and one blue lamp for night lighting.

Exhaust fans are installed, one at each end of the car; they are located over the ceiling in the toilet rooms. Exhaust ducts extend to the lavatory and toilet and, at



The Drop-Equalizer Truck Has Coil Springs Under the Bolsters

one end of the car, to the regulator locker. These fans are electrically controlled through the blower-fan-control circuit breaker so that the blower fan and exhaust fans operate at the same time.

Air-Conditioning

The air-conditioning apparatus is the electro-mechanical Frigidaire type of modulated cooling control consisting of the compressor condenser unit located beneath the car floor and the air-conditioning unit above the ceiling. The evaporator or cooling coil is divided into two parts so arranged that the 55 per cent capacity section of the evaporator cycles under control of a differential thermostat and the 45 per cent capacity coil operates continuously with control to limit the low temperature by cycling of the compressor.

Insulated ducts conduct the conditioned air to Aerofuse combination air outlets and lighting fixtures located at the center line of the ceiling. The floor heat control panel is of the Vapor type, as is all other steam heat equipment, including copper unit-fin type radiation and thermostatic control, on 20 of the cars. On 25 cars, this equipment is of the Fulton-Sylphon type. Vapor end valves and couplers are installed, with Barco horizontal-type insulated steam-heat connections. The train line consists of 25%-in. inside-diameter, seamless-steel tubing. Wovenstone insulation is applied on all steam pipes and fittings under the car.

Lighting Equipment

Lighting equipment consists of a General Electric 20-kw. 80-volt generator and a 15-hp. 220-volt, 3-phase induction motor, assembled as one unit and mounted on the car body with resilient mountings designed for proper weight distribution. The generator unit is driven by a Spicer drive equipped with an automatic clutch. Suitable a. c. standby receptacles permit the air-conditioning equipment to be operated at stations and terminals, D.c. charging receptacles are available for charging the Gould 32-cell 600-amp. hr. batteries. Lamp regulators are of the Safety carbon-pile type, with the regulator set at 60 volts at the center of the lamp load.

Air brakes are the New York Schedule H.S.C. with D-22 control valves, providing for the future application of electro-pneumatic and speed governor control. Two 12-in. by 10-in. cylinders per truck are installed with an automatic slack adjuster for each cylinder. The hand brake is Peacock, applied by the National Brake Company.

The trucks are of the General Steel Castings fourwheel, single drop-equalizer type, with a 9-ft. wheel base. Simplex unit cylinder clasp brakes are installed and designed to develop 250 per cent braking power when needed. The bolster and equalizer springs are of the coil type, supplied by the Crucible Steel Company. The axles, with 5½-in. by 10-in. journals, are designed for the application of roller bearings, 35 of the cars being equipped with Hyatt bearings and 10 with Timken roller bearings. All journal boxes are supplied with stench bombs to give advance warning in case of overheating. The Carnegie-Illinois wheels are 36 in. in diameter, solid wrought carbon-steel type with 11-in. hubs and toughened rims.

The truck center pins are of the Miner locking type, 4 in. in diameter, roller side bearings also being of the Miner type. Shock absorbers on all trucks are of the one-way vertical type. Houde shock absorbers are used on 25 cars and Monroe on 20 cars.

Sound-deadening pads consist of bolster stops made of rubber vulcanized to steel plates, spring-plate stabilizing cushions of the same construction and equalizer-spring sound-insulation fillers made of Fabreeka. The truck center plates are of cast steel, machined on the inside, at the bottom bearing surface, and at flange edges for a tight fit between retaining lugs on the truck bolster. The truck center plates are sealed to dust and have facilities for lubricating.



The Four-Track Hell Gate Bridge of the New York Connecting Is a Massive Structure. This View Shows the West Pier of the Arch

Bridge and Building Officers Prepare for Any Emergency



Modern Wall and Ceiling Materials, a New Floor Covering, Improved Lighting, and an Open-Top Ticket Counter, Completely Modernized the Interior of the Old C. & N. W. Station at Rochester, Minn.

eighth annual convention of the American Railway Bridge and Building Association that appeared in the Railway Age of October 25, together with abstracts of two addresses and two committee reports, abstracts of the five remaining committee reports and of three other addresses that were included in the convention program, appear in these columns. The addresses were presented by P. O. Ferris, chief engineer, Delaware & Hudson, on Maintaining Forces in a Period of Widespread Demand for Skilled Labor; by A. E. Pierce, engineer water supply, Southern, on Modernizing Water Service Facilities to Meet Modern Operating Conditions; and by A. O. Lagerstrom, architect, Chicago, Milwaukee, St. Paul & Pacific, on Railway Buildings in a Changing Age. The committee reports covered embrace the following subjects: The Possibilities of Off-Track Equipment in Bridge Construction and Maintenance; The Maintenance and Repair of Bridge and Building Equipment; Efficient Methods of Transporting Bridge, Building and Water Service Gangs; Recent Developments in Paint Removal; and Welding in Water Service. Abstracts of the addresses before the

Abstracts of three addresses and five additional committee reports presented before the forty-eighth annual meeting of the American Railway Bridge and Building Association on October 14-16

Part II

convention by C. E. Smith, vice-president, purchases and stores, New York, New Haven & Hartford, on What We Are Facing in Materials, and by G. A. Haggander, assistant chief engineer, Chicago, Burlington & Quincy, on What We Can Do About It, will appear in the issue for next week.

Recent Developments in Paint Removal

Pointing out that the adequate removal of old paint films and the proper cleaning and preparation of surfaces, as well as the application of suitable protective coatings, are now of utmost importance to maintenance officers, especially in view of the general revival of painting programs after a decade characterized by a tremendous accumulation of deferred maintenance painting, a committee, of which C. Miles Burpee, managing editor, Railway Engineering and Maintenance Cyclopedia, was chairman, presented a comprehensive review of methods by which this kind of work is being done, and a summary of the extent to which a large number of roads of the country are using the various methods. The report was based on data received from 33 railways, representing more than 70 per cent of the total line mileage of the railways in both the United States and Canada.

With reference to steel structures, the committee discussed hand cleaning, cleaning with pneumatic tools, sandblasting, flame cleaning, and the use of petroleum products and compounds containing rust-inhibiting chemicals. The survey of the committee showed that 25 railways, comprising 154,886 miles of lines, or almost 75 per cent of the total mileage reporting, are using pneumatic tools to some extent, and that nine of these roads, representing 19 per cent of the total mileage reporting, are using such tools for 50 per cent or more of their steel cleaning programs. Sixteen railways, representing 116,260 miles of lines, or 56 per cent of the

total line mileage under consideration, reported the use of sandblasting to some extent for cleaning steel sur-

Concerning flame-cleaning, one of the latest methods being adopted by the railways, the committee said, in

part, as follows:

"Oxy-acetylene flame-cleaning of structural steel is accomplished by the use of specially-designed burners which are passed over the surfaces to be cleaned in such a manner as to subject surface scale to intense, hightemperature flames. In the resulting action, the surface layer is raised to a high temperature, which sets up stresses within it, causing it to expand and to free itself from the underlying cool, brittle layers before the steel is warmed enough to expand appreciably. Although the practical development of flame-cleaning structural steel is of recent origin, the process has already been used by no less than 15 of the railways which were canvassed, representing 110,764 miles of lines, or the equivalent of more than 53 per cent of the total line mileage covered by this report."

Of the 33 railways which replied to the committee's questionnaire, 22 roads, with a combined line mileage of 151,513, equivalent to 73 per cent of the total line mileage of the survey, reported the use of petroleum compounds and products to some extent for the protection of steel structures. Six of these roads, representing 28 per cent of the mileage of all of the roads that

reported, use these products extensively.

As the result of a question relative to the cost of cleaning steel structures, it was evident from the report that most roads keep limited, if any, cost records of various methods of cleaning, it being pointed out that of the 33 roads reporting, only 14 roads, with only about one-third of the total mileage covered, maintain records of the costs of cleaning steel structures.

Modernization of Water Stations to Meet Modern Operation

The modernization of water service facilities to meet modern operating conditions has been given active and favorable consideration by many railroads during the last few years-resulting in substantial savings with a relatively small cash investment. Economy in railway operation has been the slogan. Just to put on another pumper has not been the solution, because it has not been possible for us to forget the increased economy in operation that has been essential. Storage tanks have had to be increased in number or size to take care of the demands due to the reduction in the number of water stations. To reduce the time required for taking water, larger water columns and supply lines have had to be installed; larger pumps have been required.

A number of different improved types of pumping equipment are being used to take the place of the old steam pump. Where coal or electricity is not available economically, an oil engine may be used to operate a deep well turbine pump or a horizontal power or centrifugal pump. These oil engine units may be operated.

automatically.

We now have available close-coupled centrifugal pumps, with the impeller applied to the extended motor This is a most dependable type of pump and can be installed in any position. An automatic motor-driven power pump may be used, which does not require a foot valve or priming device. However, in my opinion,

* Engineer Water Supply, Southern, Washington, D. C.

the deep-well type turbine pump is the most dependable and economical pump for automatic service. Some roads have installed this type of pump with the motor in the well below the pump, always covered with water. Such a pump is known as the submersible-type turbine deep-

well pump.

It is not to be expected that any type of automatic pumping equipment, without a pumper, can go without periodic inspection. It is the duty of the pump repairman to test pumps periodically and to give them general overhauling as necessary, including attention to lubrication and the maintenance of clean suction wells. Repair parts should be carried for large or important pumping stations. All automatic terminal pumping stations and stations with chemical treating plants should have full or part-time attendants.

Where electric pumping units are installed, it is advisable to retain the existing old steam or oil engine units as stand-bys for emergency operation, in case of current failure. These existing units should be kept in good operating condition. To be sure that they are available at all times, quarterly reports should be made, indicating the date they were actually operated, the con-

dition at the time of test, and all necessary repairs made. The retirement of water stations should be given most careful consideration. It is a rather dangerous thing to abandon a source of water supply, tanks, pipe lines and pumping equipment until, through actual operation, it is

known definitely that this step can be taken.

While the Southern Railway has retired more than 60 water stations during the last few years, it has not been done without careful study in each case. Not until it was proved definitely that a station was not required, even for emergency, through actual operation of the new arrangement for several months, was the facility ultimately abandoned.

During the last six years we have been given special appropriations for carrying on an extensive program to eliminate our old steam plants requiring from one to three pumpers. We now have more than 80 fully-automatic, motor-driven water stations. Sixty of these stations cost \$110,000, and have effected actual annual net savings of \$78,000, or 70 per cent on the total investment.

At one station alone, where a deep well installation was made, eliminating the purchase of city water at 12 cents per 1,000 gal., the annual saving which resulted amounted to \$9,800. At other stations, using closecoupled centrifugal pumps, costing \$1,300 to \$3,500, we have effected annual savings of 40 to 80 per cent, respec-

I cannot agree with the statement found in one of the railway magazines recently, that if the use of Diesel locomotives continues at the present rate "the days of the water station will be numbered." An exceptionally good quality of water is required for cooling Diesel engines, and, in addition, air-conditioning requires about three times as many watering points as oil fueling locations.

Maintaining Forces in a Period of Intense Demand for Skilled Labor

By P. O. Ferris*

The problem of maintaining forces is always serious and important, but it is especially so in a period such as we are facing today. The stimulus to business brought about by the war has created many new demands, calling not only for the expansion of present industries but also requiring the creation of many new

^{*} Chief Engineer, Delaware & Hudson, Albany, N. Y.

ones. Such demands for production naturally create

enormous demands for labor.

Most of the classes of skilled labor demanded by other industries are to be found in the bridge and building departments of the railroads. How are we going to hold the best of these men and guard against men with undesirable characters, poor or unstable habits, and discontented minds, who are always troublemakers? I believe the solution lies in reducing our forces to a point so small, consistent with proper maintenance, that those retained can be employed continuously the year around—a force so small that it will be unaffected by financial reverses. How can this be accomplished and yet maintain our structures properly? It can be done by removing unnecessary structures; by building for permanence; by mechanizing our forces wherever it is economical to do so; and by contracting our major projects.

On the Delaware & Hudson, we have had very little trouble keeping our bridge and building forces stabilized. On each division, we have a bridge and building department under the supervision of a bridge and building master or supervisor, who reports to the division engineer, who, in turn, reports to the chief engineer. In addition, we have a system bridge steel department, under the supervision of a general foreman, who reports direct to the engineer of structures, who, in turn, reports to the chief engineer. There has been no change whatever in the personnel of this latter department for

more than 12 years.

Most of our bridge and building employees have been with us for many years. The service records of our foremen range from 3 to 41 years, with an average of 20 years; of our skilled workers, from 2 to 43 years, with an average of 16 years; and of our helpers from 1 year to 22 years, with an average of 14 years. From this it is seen that we have had little, if any, trouble in maintaining the bridge and building forces on the Delaware & Hudson. We have several major defense industries on our lines and numerous other industries, but, in spite of this, to date we have had no losses which could not be replaced. There must be some reason for this.

One of the drawbacks to securing and retaining good skilled employees is the uncertainty of steady employment. Although it may be necessary to reduce forces at times during the winter months, a reputation should be established for employing an average force the year around. The building industry and many manufacturing industries do not have such a reputation and, although their hourly wage scale may be higher than on the railroads, in the last analysis, the average employee is concerned primarily with the amount of regular pay on which he can depend.

If possible, hire men from the smaller communities, rather than from the cities, for men in the smaller communities usually have learned how to work and all that is necessary is to train them. Wage rates and the cost of living are lower than in the cities, and railroad labor

rates are, therefore, attractive in comparison.

When men are away from home, provide good living quarters and permit them to return to their homes over week-ends. Use care in the selection of your men, not only from the standpoints of age, health and physical qualifications, but also from those of character and disposition. Create a first-class safety-first organization. Have as many men as possible take an active part in it. Have a standard and fair discipline system, uniform throughout the entire railroad. Choose supervisory officers and foremen with reputations for experience, intelligence, and unquestioned disposition and character.

The abuse of employees by officers or foremen should not be tolerated. Good men will endure it only under circumstances that compel them to. Promote foremen, and at least some of your supervisors, from the ranks. Let your employees know by this action that there is a chance for their advancement; a premium for faithful and efficient service. The workmen we desire to hold can be convinced that the working conditions and high wages being created in other industries at the present time are artificially maintained, and are of uncertain and, perhaps, short duration.

Maintenance and Repair of Bridge and Building Equipment

Calling attention to the increasing mechanization of bridge and building gangs in recent years, a committee, of which Martin Meyer, supervisor bridges and buildings on the Chicago & Western Indiana, was chairman, saw the proper care of equipment as a matter of major importance. "That there is a real necessity for the effective and efficient maintenance of such equipment, is

beyond question," it said, and then continued:

"The investment in equipment must earn a profit, and this profit must not be lost by inefficient machines, costly delays to large gangs, accident and injury expenses due to machine failure, unnecessarily large expenditures for repairs, or shortened service life due to improper care. An idle machine is a frozen asset and a broken-down machine is an actual liability. We all know what it means to have a machine fail, and to have to resort to hand labor and obsolete methods to complete a job—the added cost, the additional time required, and, in some cases, the impossibility of completing the job until the machine is repaired or replaced with a similar unit. This is extremely serious when it interferes with the movement of trains."

In the body of its report, the committee discussed various systems and organizations for the repair of work equipment employed on different roads, from the exclusive repair shop maintained by the maintenance of way and structures department, to the exclusive handling of such repairs by the mechanical department shops, and in between these two, a variation in which each type of shop handles certain classes of repairs. It also discussed system shops as compared with division and district shops; the importance of programming repairs as far as possible, and of adequate forces for making field repairs; the need for adequate records of repairs and repair costs; the urgency of proper lubricants and proper lubrication; and the need for foresight in arranging for repair parts and supplies.

Summing up its observations, the committee said, in

part, as follows:

"No particular system of maintaining work equipment can be designed that will fit all of the requirements of all railroads. The physical characteristics of a particular railroad—whether it is large or small, serves an extensive or compact territory, has many or comparatively few units to maintain, its location with regard to large industrial centers, and a never-ending list of other conditions—all influenced the decision as to what system is best suited to its particular needs. Even when a definite system has been established, it must be extremely flexible so that, in case of the sudden failure of a machine, every advantage can be taken of local conditions to accomplish its repair and restoration to service most expeditiously.

expeditiously.

"Shop repairs to work equipment should be made in a shop or shops independent of those used for maintain-

ing operating department equipment. This should include all repairs not coming under MCB rules, which repairs are probably made most properly in the regular

mechanical department shops.

"The activities of the work equipment shop should be directed by the engineer maintenance of way or other chief maintenance officers. Every effort should be made to avoid dividing the responsibility for the proper maintenance of equipment. Field repairs should be made by persons employed in the bridge and building department and supervised by bridge and building officers. The field force should be large enough to be efficient. Good work in the field will prevent the necessity of many extensive and expensive shop jobs

extensive and expensive shop jobs.

"A complete assortment of the required tools should be provided, and the shop equipment should be housed in a suitable building with plenty of working area. Sufficient clerical force should be provided to maintain complete performance and cost records. Close co-operation should be cultivated with the stores department to the end that stocks of repair parts and supplies will be kept adequate, but never excessive. Furthermore, good supervision should be provided. Nothing can take the place of the brain of a man who knows his busi-

ness."

Off-Track Equipment in Bridge Construction and Maintenance

Starting out on the premise that the necessities for saving time and money and of facilitating train operation are universal objectives and should not be overlooked, regardless of the size of the project, the committee reporting on the possibilities of off-track equipment in bridge construction and maintenance, of which H. T. Livingston, engineer of bridges of the Chicago, Rock Island & Pacific, was chairman, analyzed in detail the advantages and disadvantages of off-track and on-track equipment. Except for special uses, the committee saw serious disadvantages in on-track equipment under present-day operating conditions, in which delays to traffic cannot be tolerated. On the other hand, it looked with favor upon many types of off-track equipment.

Among the disadvantages of on-track equipment cited by the committee were the inevitable delays to traffic, or the repeated delays in the use of the equipment in attempts to avoid delays to traffic; the restriction of the range of work to points on or near tracks; the necessity for the more frequent use of work trains; longer moves by rail in many cases; lack of versatility; delays to other gangs in moving through them to points of operation; higher labor rates for the operators of on-track equipment, many of whom must be transportation department employees under existing labor contracts; and increased hazards to both the equipment and train operation. Conversely, in most types of off-track equipment, of both the crawler-mounted and pneumatic tire-mounted types, such as convertible, gasoline and Diesel-operated dragline-shovel-cranes, trucks, air compressors, generators, etc., the committee saw greater flexibility, increased economy of operation, minimum interference to traffic and work operations, greater efficiency and minimum hazard to the equipment and train operation.

Recognizing the on-track pile driver and locomotive crane as the two principal heavy machines used by the bridge and building forces, the committee admitted that these units could not be dispensed with entirely, but said that railway officers should restrict their use to actual needs, pointing out that such a policy will probably reduce the number of on-track machines retained in

service, and thus permit the purchase or rental of modern

off-track equipment.

The committee did not overlook the objections to offtrack equipment, pointing out the costs involved for state and city vehicle licenses, drivers' licenses, ad valorem taxes, inspection fees, liability insurance, etc. Neither did it propose other than the greatest care in the purchase of such machines, pointing out in this regard that roads should avoid overstocking such machines, and that they should be purchased only after careful investigation has proved that they offer economies and other distinct advantages over on-track machines.

In conclusion, the committee said, in part, as follows: "The use of off-track equipment is not only possible, but is highly desirable and economical in many instances. Individual initiative on the part of officers will, in general, determine the scope of its use. In connection with the use of such equipment, the committee suggests that

the following points be observed.

"(1) Design structures and prepare plans and specifications that will invite the use of off-track equipment.

"(2) Co-operate with manufacturers to improve ma-

chines and widen the scope of their use.

"(3) Study and originate methods of application of existing off-track machines, and to avoid the use of ontrack machines.

"(4) Do not use on-track equipment unless it is warranted economically; unless off-track equipment is not available; unless emergency requires its use; and unless the location and type of work forces its use."

Railway Buildings in a Changing Age

By A. O. Lagerstrom*

Every modern concern which sells to consumers, even including such bulwarks of conservatism as banks, knows that, to present itself to the public favorably, it must be attractive. We, as the designers of railroad structures, must fall in line with modern, functional design. I emphasize the word functional, because many new and successful materials are available to us now, and their use should lead us into more modern, more practical and less wasteful design than we have practiced in the past.

We have learned, unfortunately the hard way, that through the application of modern design and materials, we can fit our buildings in with local settings. Too often in the past, to the detriment of the communities in which we have tried to instill a pride in their railroad facilities, we have designed without regard for their local backgrounds. This policy did not invite revenue or respect.

Today, as the result of scientific research and the development of new tools and materials, the dreams of building men have largely come true. Are we taking advantage of these developments? Are we using them as efficiently as other modern industries are? Unfortunately, it has been much easier to get our competitors, the air and bus lines, interested in merchandising through appeal in their structures and facilities, than it has been to interest railway officers, who have lived with their structures so long. It is really remarkable that we have been able to compete with our competitors as well as we have, in the face of their new facilities that incorporate the last word in appeal and service.

We building men on the railways know all the requisites of our jobs. We are specialists and so are our superior officers. We do not need the assistance of outside specialists for many of our detailed design problems, although such specialists, with a general "bird's-eye

^{*} Architect, Chicago, Milwaukee, St. Paul & Pacific, Chicago.

view" of all transportation requisites, can be of greathelp in aiding railway managements in visualizing the importance of modern architecture in their more important stations, and the part that their building departments must play in this regard, if we want to "Keep up with the Jones's."

Efficient Methods of Transporting B. & B. and Water Supply Gangs

Answering the question in the minds of many bridge and building and water service officers as to the extent to which they can use the highways to facilitate their work and effect economies, a committee reporting on Efficient Methods of Transporting Bridge, Building and Water Supply Gangs, of which S. S. Long, division engineer, Chicago & North Western, Green Bay, Wis., was chairman, presented data that showed that under present railway operating conditions and the wide expansion of highways, the use of the highway truck offers many advantages over the continued use of track cars, and especially for large terminal gangs. Concerning the advantages of highway motor trucks, it said, in part, as follows:

"At the larger terminals, suitable trucks will definitely expedite the movement of bridge and building gangs to and from work, and will readily permit the distribution of the different members of the gangs so that all may be employed advantageously on necessary work. Furthermore, they will insure keeping these men supplied with the materials they need direct from the store room or headquarters, thus eliminating the possibility of its theft, going astray, or being stored in some building where, perhaps, it may be forgotten. In addition, they will make possible the immediate and proper disposition of material removed or left over upon the completion of the job. One truck can readily handle and supply several crews within a limited radius, and also have time in which, under proper supervision, to serve the needs of other departments."

At another point in its report, the committee spoke of the unlimited flexibilty in the use of highway vehicles in transporting just the right number of men to handle specific jobs, in handling tools and materials, and in insuring their delivery to the site of the work at the time required. At still another point, it emphasized the smaller delays in the transporting of bridge and building forces, tools and materials via the highways, and then pointed out that water service forces can often take advantage of the highways even more readily than bridge and building forces because of the smaller size of crews and the fact that water service facilities can invariably be reached by highways.

To a large extent it saw the requirements of bridge, building and water service gangs for highway transportation satisfied in the "stake body" truck of three tons' capacity, sheathed on both sides of stakes and covered with removable bows and canvas. The body of this type truck, it pointed out, is 7 ft. wide and 16 ft. 6 in long, and is provided with plank seats designed for convenient folding or entire removal when the space is needed for handling material.

In conclusion, the committee said, in part, as follows: "The use of the highways permits the concentration of forces at the larger terminals and headquarters, thereby enabling the supervisor to assign men to various jobs more advantageously from day to day, and to use the tools and equipment at his disposal to better advantage. Suitable highway conveyances make it possible to expedite the special rush jobs, small or large, and to take

care of emergencies at distant points, near which no crew may be located.

"The handling of material by trucks makes it possible to maintain smaller stocks, prevents loss and theft, and insures delivery at the time needed. The elimination of, or reduction in, the number of outfit car units made possible, relieves the operating department of costly interference with train operation. Handling material by trucks may frequently obviate expensive work-train service.

"Light trucks or automobiles permit greater efficiency on the part of water service employees and others, including general foremen and supervisors. Close supervision of highway vehicles will result in valuable assistance in many ways, not only to those in the maintenance of way department, but to others as well."

Welding in Water Service

Indicative of the widespread adoption of oxy-acetylene welding on the railways for construction, maintenance and repair purposes since the first World war, the committee reporting on the use of welding in water service, of which J. P. Hanley, water service inspector, Illinois Central, was chairman, pointed out that during 1940, one mid-western railway, with approximately 6,800 miles of lines, purchased 23,781,900 cu. ft. of oxygen gas and 9,351,000,018 cu. ft. of acetylene gas. It stated that it is regrettable that the water service department was about the last department on the railways to adopt this process, but pointed out that replies to a questionnaire which it sent out, indicated that the majority of the water service departments of the railways now employ welding equipment, and that their men are becoming competent in its use.

Most of the report was given over to a synopsis of information received from various roads relative to their use of welding, both oxy-acetylene and electric arc, in water service work, the committee giving emphasis to the expressions from six roads, only one of which reported that it was making little use of welding. One of the roads making extensive use of welding in pipe work said that the advantages of welding by water service gangs are many, and recommended that a portable oxyacetylene welding outfit be furnished each water service

Another road reported that all of its pipe fitters, plumbers and water service men, and their helpers, have taken up the study of welding, and that practically all of them are good welders. Continuing, the statement from this road pointed out that it is now using more welded joints than old style threaded joints in its pipe lines, welding being employed wherever possible in preference to threaded joints, since it makes a better appearing job, with less likelihood of leaks.

In a statement received from still another road, it was pointed out that 11 of the 12 division water service gangs on this road use welding in their work and have one or more oxy-acetylene outfits in their gangs. In addition, it stated that one of these gangs also uses an electric arc welder for shop work and cast iron welding, and that one system water service gang uses oxy-acetylene welding extensively.

As the result of its study, the committee offered a number of conclusions, two of which are as follows:

"Welding is now generally recognized as a necessary process in water service, as well as in other departments of the railways, and equipment and training are being supplied to water service men by most roads.

"It is recommended that welding outfits be supplied

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to water service men where outfits are not now available, and that supervisory officers make arrangements to supply the necessary training to the men and to otherwise encourage them to become proficient welders to such extent as is useful in water service work."

1940 Traffic 78 Per Cent of "Potential"

WASHINGTON, D. C.

CLASS I railroads in 1940 failed by 283,266,000 tons to maintain their 1928 position as carriers of freight originating from production in this country, according to the latest study of "Fluctuations in Railway Freight Traffic Compared with Production" which has just been issued by the Interstate Commerce Commission's Bureau of Statistics. A computation in the study indicates that the carriers last year failed by \$1,444,855,000 to maintain their 1928 revenue position, although it is pointed out that this figure "represents all freight revenue lost from whatever cause, whether based on tonnage lost, or reductions in freight rates on the traffic retained, or on a reduction in the distance hauled."

The study (Statement No. 4130) is similar to previous ones that cover 1939 data which was reviewed in the Railway Age of August 17, 1940, page 258. It computes indices based on 1928 as 100 of production, potential railway tonnage and actual railway tonnage. The application of the production index for each year to the 1928 railway tonnage gives for each year what is designated in the tables as "potential railway tonnage," i. e., the amount the railroads would have carried each year if they had been maintaining their 1928 position. Against this "potential" tonnage, the actual traffic is set up, and the differences between the two measure the railroad losses.

In 1940 the Class I roads, if they had maintained their 1928 position, would have carried 1,316,855,000 tons or 99.5 per cent of their 1928 traffic; actually they carried only 1,033,589,000, or 78.1 per cent of the 1928 business. Stated otherwise, the Class I roads carried 46.8 per cent of the country's 1928 production, whereas they handled only 36.3 per cent of the 1940 output. Moreover, if all classes of railroads and all classes of traffic (express and parcel post as well as freight) be considered, there was a failure by 311,722,000 tons to maintain the 1928 position. Also, there is the usual table showing the drastic decline in revenues from milk traffic. In 1928 it amounted to \$36,670,061 and in 1940 to \$8,798,224; and, meanwhile, production of milk on farms had increased 15.8 per cent.

Commenting on the figures, the Bureau of Statistics noted that from 1928 to 1938 "there was a marked and almost continuous decline in the traffic position of the railways." It added: "A slight improvement was shown for 1939 over 1938, and the present report shows a further slight improvement for 1940 over 1939, but the changes in both 1939 and 1940 were so small that they perhaps indicate stabilization rather than improvement."

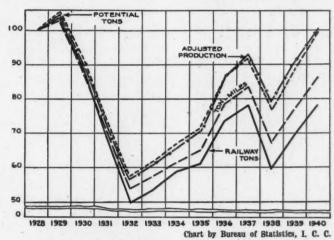
Data by commodity classifications show that the 1940 production index number for products of agriculture was 103.2, the index for Class I railroad tonnage 73.7. In 1928 the Class I roads carried 39 per cent of the agricultural production as compared with 27.8 per cent in 1940. The 1940 production index for animals and products was 125.7, the index of railroad tonnage 60.1.

Between 1938 and 1940 the proportion of this production hauled by rail dropped from 72.8 per cent to 34.8 per cent

Production of products of mines in 1940 was 98.5 per cent of the 1928 output, but railway traffic in that category was only 81.7 per cent of the 1928 business. In other words, the Class I roads received a haul on 51.2 per cent of the 1928 mineral output, but this figure dropped to 42.4 per cent for 1940. The 1940 production index for products of forests was 81.7, and the index of railway tonnage was 58.5; railways in 1940 hauled 22.1 per cent of the production as compared with 30.8 per cent in the base year.

As against a production index of 110.9, the 1940 index of railroad tonnage in the manufactures and miscellaneous group was 84.3. The railroads handled only 32.8 per cent of the production in 1940 as compared with 43.2 per cent in 1928. The 1940 production index for 1. c. i. freight (not including freight in forwarder carloads) was 100.6 while the index of railway tonnage was 39.8.

Because "there is some question whether for the purpose of this paper, actual railway tonnage should be



Commodity Production and Railroad Tons and Ton-Miles Compared
(1928-100)

compared with tonnage produced or with tonnage shipped or sold," the Bureau in the present study included tabulations wherein the statistics of shipments or sales of twelve "important commodities" were substituted for their production figures. When the totals for all commodities are changed to include the shipments and sales figures in place of the production figures for the aforementioned twelve commodities, the effect on the ratio of actual railway tons to potential railway tons is to change the 1940 figure from 78.5 per cent to 78.4 per cent.

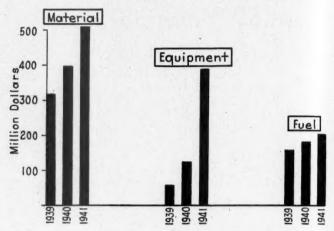
A CANINE RAILROADER has been honored by a bronze plaque placed in the Pennsylvania-Reading Seashore Lines passenger station in Atlantic City, N. J., recently. "Rags," a flop-eared mongrel dog, met all incoming trains at Atlantic City for 12 years. A couple of months ago he showed signs of getting old and was put "on pension" and sent to the S. P. C. A. Shortly thereafter he died.

But he will not be forgotten. Hundreds of commuters, policemen, taxicab drivers and railroad employees attended the unveiling of a bronze plaque placed on the cornerstone of the station reading "In memory of Rags, a great mascot and a good railroader 1928-1941." Civic and railroad officers attended and spoke briefly, while a W. P. A. brass band played "The Whistler and His Dog."

8 Months' Buying \$1,105,000,000

More than \$453,000,000 of materials used in maintenance and repairs—Inventories up 18 per cent

URING the first eight months of this year, according to figures gathered by Railway Age, railroads, private car lines and departments of the Government ordered about \$385,619,000 of new locomotives and cars from builders for use in this country. In the same period, the Class I railroads received by purchase, \$719,685,000 of materials, supplies and fuel, of which \$511,281,000 was for maintenance and repairs and for building cars in railroad shops. This brought to \$1,105,304,000 the materials and supplies received and new equipment ordered in the eight months. During the same period, the Class I railroads used \$673,906,000 of new materials, supplies and fuel, of which \$453,322,-000 went for maintenance and repairs. These figures exclude purchases of electrical energy and miscellaneous services, materials purchased by contractors of new railway construction projects, materials or equipment pur-



Materials and Fuel Received and Equipment Ordered First Eight Months

Railway Purchases-Materials and Equipment First Eight Months Each Calendar Year

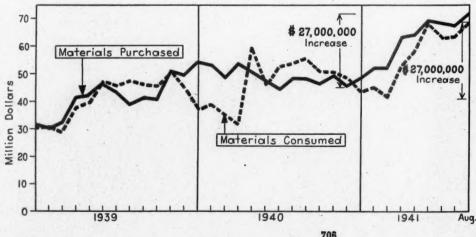
	Materials received from mfrs. (000)	Equipment ordered from mfrs. (000)	Total from mfrs. (000)	Fuel (000)	Total including fuel (000)
1929	\$647,701	\$269,522	\$917,223	\$226,399	\$1,143,622
1930	548,446	125,847	674,293	209,954	884,247
1931	341,864	23,642	365,506	164,136	529,642
1932	187,700	2,049	189,749	118,000	307,749
1933	169,599	3,810	173,409	116,940	290,349
1934	287,590	57,484	345,074	138,065	483,139
1935	243,340	23,143	266,483	156,210	422,693
1936	348,218	105,992	454,210	168,326	622,536
1937	497,476	163,388	660,864	188,695	849,559
1938	222,920	33,669	256,589	153,151	409,740
1939	316,844	57,123	373,967	163,290	537,257
1940	393,381	120,867	514,248	177,667	691,915
1941 Subject to revision	511,281	385,619	896,900	208,404	1,105,304

chased in this country for use in Canada and Mexico, and materials not delivered up to September 1.

The purchases were made before material shortages created by the national defense program became most acute and represent impressive sums when measured by any standards other than the authorizations and expenditures by the Government for military purposes. They were bought for consumption, are payable out of earnings, and the totals particularly throw light upon the preparations that are being made by the railroads for wartime traffic and upon the requirements of the railroads for maintenance and repair materials which are now becoming more difficult to obtain.

The orders for new locomotives and cars were larger by approximately \$265,000,000, or 210 per cent, than the corresponding orders in the first eight months of 1940 and were larger by \$116,096,000, or 40 per cent, than the orders in the same period of 1929. Materials received from manufacturers for maintenance and repairs up to September 1 were larger by \$117,900,000, or 30 per cent, than the purchases in the same months of 1940. and the combined value of the materials from manufacturers and equipment orders placed with manufacturers in the eight months' period, aggregating \$896,900,000, was a gain of \$382,652,000, or 75 per cent, over the same period in 1940. The total of materials, equipment and fuel was an increase of \$413,389,000, or 60 per cent over the total of the corresponding month of 1940 and within \$38,318,000, or 3 per cent, of this paper's total figure for the first eight months of 1929.

Rail and crossties received up to September 1 showed



Month to Month Trends of and Consumption

no increase over the same period of the previous year. This is probably due, especially with rail, to the increased difficulty of getting deliveries. Materials other than rail, ties and fuel were received in increasing amounts each month this year. Aggregate receipts in August, totaling \$65,078,000, showed a gain of \$23,061,000, or 55 per cent over August, 1940, and the eight months' total was an increase of \$121,696,000, or 38 per cent, over the same period of 1940. Aggregate purchases of materials and fuel totalled \$102,648,000 in August, which was larger than any monthly total since February, 1930.

Materials and fuel, exclusive of equipment, received

Materials and fuel, exclusive of equipment, received during the first eight months of 1941 reflected increases over the corresponding purchases in the same months of 1940, which amounted to \$7,733,079, or 25 per cent, on the Atchison, Topeka & Santa Fe, \$2,169,958, or 38 per

Eight Months Purchases—Material and Fuel (Exclusive of New Equipment)

		1940	1941		Cent	of O
	Roads	8 Mos.	8 Mos.	Increase	Inc.	Rev
	A. C. & Y	\$284,927	\$387,545 3,021,922 320,991	\$102,618 124,579 108,384 -14,315 7,733,079	35	18.6
	Alton	2,896,343	3,021,922	124,579	50	23.1
	Alt. & Sou	212,607	700.257	-14.315	-1	22.5
	A. T. & S. F	714,572 29,228,941	700,257 36,562,020	7,733,079	25	25.6
	A. B. & C	538,164	670.223	132,039	24	22.1
	A. C. L	9,633,795	10,478,378	844,583	30	23.4 19.7
	B. & O Bang. & Aroos	872,261	845,462	6,685,429 -26,799 210,089	-3	14.0
	Belt of Chi	21,692,057 872,261 600,253 5,636,048	28,377,486 845,462 810,342	210,089	35	
	Bost. & Me	5,636,048	7,806,006	2,169,958	38 120	20.2 8.7
	BurlR. I Cam. & Ind		70,282 155,243	38,633 54,979	55	13.0
	Cent. of Ga.	100,264 2,711,133 5,597,845 1,142,143	3,375,096 6,660,903 1,282,072	663,963 1,063,058	55 24	23.8
	Cent. of N. J.	5,597,845	6,660,903	1,063,058	18 15	23.2 24.8
	Cent. of N. J Cent. of Vt Char. & W. Caro	526,344	587,973	139,929 61,629	11	26.0
	C. & O		14.873.037	824,595 411,773	6	15.6 21.5
	C. & E. I	2,181,823	2,593,596	411,773	19	21.5 19.8
	C. & I. M	523 221	662,496 541,798	19,165 18,577	3	17.0
	C. & O	13,469,113	15,585,744	2,116,631	15	20.9
		2,728,796	2,656,654	-72,142	-3 14	19.3 20.7 25.2 19.7
	C. R. I. & P Colo. & Sou,	000 041	13,214,733 1,302,385 168,465	1,614,237 303,344 31,771	30	25.2
	C. & G	136,694	168,465	31,771	24	19.7
	C. & G Del. & Hud Det & Mack	14,048,442 2,181,823 643,331 523,221 13,469,113 2,728,796 11,600,496 999,041 136,694 4,090,775 104,172	4 931 682	840,907	21	22.8
	Det. & Mack. Det. & T. S. L. Det. Tol. & I. D. M. & I. R.	104,172	121,652 298,708 662,095 2,634,295	17,480 73,787	16 31	24.2 10.5
	Det. Tol. & I.	747,202	662,095	73,787 -85,107 666,354	-11	10.5 23.2
	Det. Tol. & I D. M. & I. R	1,967,941	2,634,295	666,354	33	11.4
	D. S. S. & A E. J. & E	224,921 747,202 1,967,941 414,514 1,554,906	558,903 2,233,926	144,389 679,020	35 44	26.0 11.7
	Erie	10,031,754 1,701,575 957,845 15,154,759	12.621.185	2,589,431 -34,073 91,505	26	18.4
	F. E. C	1,701,575	1,667,502 1,049,350 18,095,636	-34,073	-2	20.6 25.0
	Ft. W. & D. C Gt. Nor.	15 154 750	1,049,350	2,940,877	19	23.0
			22,220,709	3 306 542	17	24.8
	Ill. Term	648,431 624,092 242,811 176,798	630,454	-17,977 27,321 10,859	17 -3 5 5 37	13.8
	L. S. & Ish. Leh, & Hud. R. Leh, & N. Eng. Leh, Valley	624,092	651,413 253,670	10.859	. 5	10.4
	Leh. & Hud. R	176,798	240,115	05,317		17.0
	Leh. & N. Eng	395,873 5,611,972 1,034,076 14,038,443 1,768,650	525,463	129,590	33	15.2
	Leh. Valley La. & Ark	1 034 076	1 451 944	626,225	11 40	17.0 21.9
		14,038,443	523,403 6,238,197 1,451,944 15,400,787 2,304,878 1,741,097	417,868 1,362,344 536,228	10	20.3
	Me. Cent.	1,768,650	2,304,878	536,228	31 5	23.5 25.1
	Me, Cent. M. & St. L. Miss. Cent.			91,022 53,482	50	20.3
	Mo. Izans. Tex.	1,050,075 107,761 2,378,745 222,099 2,647,401 170,884	3,463,240 226,384 2,705,627	53,482 1,084,495 4,285 58,226	45	15.7
	Montour N. C. & St. L. Nev. Nor.	222,099	226,384	4,285	2 2	15.0 21.6
	Nev. Nor.	170.884			60	59.0
	New York Cent	53,603,823	67.333.147	13,729,324 82,468 2,330,560 192,469	28	21.6
	N. Y. C. & St. L	6,112,481	6,194,949 11,740,038 945,836	82,468	24	16.2 16.2
	N. Y. O. & W	753.367	945,836	192,469	25	22.8
	N. C. & St. L. Nev. Nor. New York Cent. N. Y. C. & St. L. N. Y. N. H. & H. N. Y. O. & W. Nor. Pac. N. W. Pac.	53,603,823 6,112,481 9,409,478 753,367 9,440,554	11 905 442		26	23.0
	N. W. Pac Pa. & L. I.	269,614 47,565,457	241.788	-27,826	-10 61	10.7
	Pa. R. R. S. S	556,657	79,103,487 781,051	224,394	40	19.3 15.0
	N. Y. O. & W. Nor. Pac. N. W. Pac. Pa. & L. I. Pa. R. S. S. Pere Marquette Pitt. & Shaw. Pitt., Shaw. & Nor. Reading R. F. & P.	556,657 5,299,192	5,082,031	2,404,886 -27,826 31,538,030 224,394 383,439	7	22.0
	Pitt. & Shaw.	222 602	119,458	-103,234	-46	18.2 17.8
	Reading	6.915.565	177,522 11,208,698	63,138	55 62	22.0
1	R. F. & P.	1,564,313	1,967,671	403,358	26	21.5
-	Rutiand	114,384 6,915,565 1,564,313 532,587 6,195,153	1,967,671 687,223 9,534,529	4,293,114 403,358 154,636 3,339,376 6,795,865	29 54	27.6
-	St. LS. F. Southern S. PacPac. Sys. Tenn. Cent. Tex. & N. O. Tex. & Pac. U. P. Utah	18,211,871	25,007,736	6,795,865	37	15.8
	S. PacPac. Sys	18,211,871 24,479,215 464,672	25,007,736 28,472,484	3,993,269 -9,004 1,158,131 950,969	17	19.6
	Tex. & N	464,672	455,668 6,706,569 5,027,749 37,427,763	-9,004	-2	23.4
4	Tex. & Pac.	5,548,438 4,076,680	5.027.749	950,969	21 24	19.3 24.7
,	Tex. & N. O. Tex. & Pac. U. P. Utah	25,304,135	37,427,763	12,123,028	48	26.0
а	Vienimian	2 772 010	83,338 2,758,385	5 919	8	16.0
1	Wabash	7,276,670	7,765,079	-1,014,634 488,409	-27 7	16.5 20.6
,	Wabash W. Md. W. & L. E.	7,276,670 2,653,213 2,062,225	7,765,079 4,676,838	488,409 2,023,625	76	32.2
	W. & L. E	2,062,225	2,978,051	915,826	43	21.6

cent, on the Boston & Maine, \$2,116,631, or 15 per cent, on the Chicago, Burlington & Quincy, \$2,589,431, or 26 per cent, on the Erie, \$3,306,542, or 17 per cent, on the Illinois Central \$13,729,324, or 28 per cent, on the New

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Railway	Purchases-Materials,	Supplies	and	Equipment

1940	Fuel (000)	Rail (000)	Cross ties (000)	Other Material (000)	Total Material (000)	Equip- ment* (000)	Material and Equip. (000)
Jan	\$24,978	\$3,529	\$4,128	\$45,593	\$78,228	\$8,889	\$87,117
Feb	24,219	4,814	3,928	39,939	72,900	3,643	76,543
Mar	21,880	6,043	4,634	42,655	75,212	7,114	82,326
Apr	21,575	6,470	4,585	39,407	72,037	17,085	89,122
24	21,851	5,019	4,789	37,122	68,781	5,902	74,683
June .	20,160	5,022	4,645	34,510	64,337	17,645	81,982
July	20,875	4,571	4,294	39,446	69,186	40,342	109,528
Aug	22,128	2,324	3,898	42,017	70,367	20,247	90,614
8 M	os. 177,666	37,792	34,901	320,689	571,048	120,867	691,915
1941							
Jan	26,319	3,131	3,669	45,581	78,700	34,632	113,332
Feb	26,937	4,788	3,714	43,586	79,025	25,126	104,151
Mar	30,046	4,671	4,320	54,218	93,255	43,821	137,076
Apr	18,274	4,297	4,614	55,403	82,588	47,816	130,404
May .	24,641	5,606	4,617	59,671	94,535	62,803	157,338
June .	26,392	4,400	4,302	59,844	94,938	93,753	188,691
July	26,472	4,179	4,341	59,004	93,996	60,840	154,836
Aug	29,323	3,691	4,556	65,078	102,648	16,828	119,476
8 M	os. 208,404	34,763	34,133	442,385	719,685	385,619	1,105,304

* Value of Orders Placed with Builders Excluding Railroad Shops. Subject to revision.

York Central, \$31,538,030, or 61 per cent, on the Pennsylvania, \$4,293,114, or 62 per cent, on the Reading, \$3,339,376, or 54 per cent, on the St. Louis-San Francisco and \$12,123,628, or 48 per cent, on the Union Pacific.

More Materials in Stock

As nearly as can be determined at this time, Class I railroads had \$404,721,000 of materials and supplies on hand September 1, consisting of \$34,823,000 of fuel, \$24,593,000 of new and second-hand rail, \$53,284,000 of crossties, \$280,707,000 of stores stock (consisting principally of materials for the repair of locomotives, cars and tracks) and \$11,314,000 of unsold scrap. This was about \$5,000,000 more fuel than was in stock on August

Materials In Stock—Class I Railroads

1940		Fuel (000)	Rail New and S. H. (000)	Cross- ties (000)	Stores Stock (000)	Scrap (000)	Total (000)
Jan.	1	\$21,778	\$25,552	\$51,359	\$216,996	\$11,551	\$327,236
Feb.	1	22,454	28,213	58,187	222,127	11,862	342,043
Mar.	1	23,190	31,546	60,615	230,045	11,576	356,972
Apr.	1	21,016	34,388	64,466	234,899	11,509	366,278
May	1	21,343	35,826	63,945	234,866	11,551	367,531
June	1	22,419	34,818	60,070	231,308	11,275	359,890
July	1	22,310	35,138	57,452	225,066	11,371	351,337
Aug.	1	24,065	34,134	55,988	222,001	11,326	347,514
Sept.	1	25,513	31,927	54,531	217,948	11,041	340,960
Oct.	1	25,442	30,055	53,517	216,201	10,848	336,063
Nov.	1	22,272	27,457.	50,374	221,444	9,711	331,258
Dec.	1	24,414	27,674	54,464	213,555	9,602	329,709
1941							
Jan.	1	24,002	25,985	50,967	223,673	9,818	334,445
Feb.	1	24,591	26,600	60,311	220,887	10,728	343,117
	1	27,105	28,217	62,455	228,012	10,859	356,648
	1	30,984	28,573	65,356	235,404	11,102	371,419
May	1	23,486	25,649	58,349	251,691	9,632	368,807
	1	24,578	26,461	57,051	252,972	10,357	371,419
	1	25,990	24,389	51,548	266,076	9,616	377,619
Aug.	1	29,855	25,395	56,781	264,370	10,180	386,581
Sept.	1	34,823	24,593	53,284	280,707	11,314	404,721
Subje	ct to revis	tion.					

1, 1941 and about \$10,000,000 more fuel than on September 1, 1940. The total reflected about \$7,000,000 less rail than on September 1, 1940, and about the same stock of ties, while stores stocks were \$62,759,000 larger than a year previous, and total inventories were larger by

\$63,761,000, or 18.6 per cent, than on September 1 of

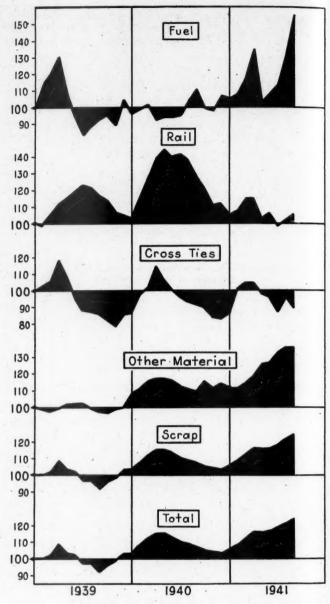
Materials exclusive of fuel, rail and ties on hand on September 1, when compared with a year previous, showed increases of 38 per cent on the Santa Fe, 40 per cent on the Atlantic Coast Line, 26 per cent on the Boston & Maine, 35 per cent on the Milwaukee, 65 per cent on the Duluth, Missabe and Iron Range, 52 per cent on the Erie, 28 per cent on the Louisville & Nashville, 33 per cent on the New York, New Haven and Hartford, 40 per cent on the Richmond, Fredericksburg and Potomac and 33 per cent on the Southern and 54 per cent on the Wabash, but showed declines of 1 per cent on the Chicago, Burlington and Quincy, 3 per cent on the Chicago Great Western, 41 per cent on the Northwestern Pacific and 25 per cent on the Pittsburg and Shawmut.

Aggregate inventories are unadjusted for increases in material costs since September 1 of last year, and the increase was less than one month's requirements of

Materials on Hand—Exclusive of Fuel, Rail and Ties

Road	Sept. 1, 1940	Sept. 1, 1941	crease	Per Cent Increase
A. C. & Y	\$79,833	\$154,339	\$74,506 171,916 14,833	93
Alton	535,894	707,810 83,346 185,288	171,916	32
Alton & Sou	68,513	83,340	14,833	21
Ann Arbor	68,513 183,599 10,134,337	14,054,696	3,920,359	38
A. C. L	2,254,436	3,163,662	909,226	40
R & O	6,670,448	9,066,708	2 306 260	35
Bang. & Aroo	701,951	637,046	-64,905	-9
Belt Ry. of Chi Bos. & Me	2 050 538	243,283	542 773	6 26
BurlR. I.	35,095	31,326	-3,769	-10
Cam. & Ind	227,393 2,059,538 35,095 35,763 673,279	2,602,311 31,326 61,319 934,493	15,890 542,773 -3,769 25,556 261,214	71
Cent. of Ga	673,279	934,493	261,214	38 16
Cent. of N. J	1,367,991 343,141	1,599,860 411,410	231,869 68,269	19
Chr. & W. Caro.	158 006	183,779	24,983	15
C. & E. I	579,985 302,031 229,462 4,307,188 578,963	762,370		31
C. & I. M	302,031	402,624	100,593	33
C. & W. I. C. B. & Q.	4 307 188	250,058 4.250,602	100,593 20,596 -56,586 -17,901 161,070	-1
C. G. W.	578,963	4,250,602 561,062	-17,901	-3
C. R. I. & P.	5,054,833	5.215.903	161,070	3
C. B. & Q. C. G. W. C. R. I. & P. Colo. & Sou. C. & G.	230,616	289,422	20,010	23
	116,006 1,501,467	109,247 1,974,608	-6,759 473,141	-5 31
D. L. & W. Det. & Mack. D. & T. S. L.	1,259,474 135,577 81,197 348,279	1,677,597 126,390 115,769 423,897	418,123	33
Det. & Mack	135,577	126,390	-9,187 34,572	-6
D. & T. S. L	81,197	115,769	34,572	42
D. T. & I	588,961	977,128	75,618 388,167	21 65
D. M. & I. R. D. S. S. & A. E. J. & E.	148,823	158,464	9.641	6
D. S. S. & A	794,271	1,010,348	216.077	27
Erie	2,146,140	3,273,454	1.127.314	52
Ft. W. & D. C.	1,241,975 396,491	1,321,555 373,926 7,556,944	79,580	-5
Gr. Nor.	6,351,185 5,210,210 302,016 157,725	7,556,944	-22,565 1,205,759 1,270,985	18
I. C	5,210,210	0.481,193	1,270,985	24
Ill. Term. K. C. Term.	302,016	332,615 194,595	30,599 36,870	10 23
L. S. & Ish		262,507	51,582	24
T & H D	51,423	75,714	24,291	47.
L. & N. E. Lehigh Valley La. & Ark.	216,373 1,646,747	351,036	134,662 212,952	62
Lehigh Valley	583 038	1,859,699 . 566,878	-16 160	12 -2
L. & N	583,038 5,483,969	7,059,198	-16,160 1,575,229 203,331	28
Me. Cent	787,848	991,179	203,331	25
Miss. Cent	50,385 1,451,986	72,297 1,675,678	21,912 223,692	43 15
Montour	163,480	148,335	-15,145	-9
N C & St. L	1,381,844	1.387.037	205.793	14
Nev. Nor	68,819 24,645,250	113,300	44,481	64
AT AF AF TE A TE	3,464,419	4 640 314	1,759,112	33
N. Y. N. H. & H. N. Y. O. & W.	389,000	113,300 26,404,362 4,640,314 344,769	44,481 1,759,112 1,175,895 -44,231	-11
IVOL. I die	5,431,348	0,007,403	5/0,05/	10
N. W. Pac.	80,363	46,933 48,113,862†	-33,430 $17,925,952$	-41 60
Long Isd	30,187,910* 1,188,282*	2.080.829†	892,547	75
P. R. S. L	157,145* 78,195 53,240 3,024,763	231,534† 58,393 64,000	74,389	47
Pitts. & Shaw	78,195	58,393	-19,802 10,760	-25
Pitts. Shaw. & Nor	3.024.763	4,366,596	1,341,833	20 44
R. F. & P	782,701	1,097,423	314,722	40
Destland	197,617	246,286	48,669	24
St. LS. F. St. L. S. W.	2,814,090	3,017,281 1,882,887	203,191	7
Southern	1,406,829 5,081,648	1,882,887 6,806,634	476,058 1,724,986	33
Sou. Pac	5,081,648 7,109,978 226,408	7,909,576	1,724,986 799,598 46,714 465,723	11
Tenn. Cent.	226,408	7,909,576 273,122	46,714	20
T. & N. O	2,188,040	2,653,763 2,966,265	465,723	21
U. P.	2,799,104 16,501,961	19,671,051	167,161 3,169,090	19
Iltah	169.372	194,529	25,157	14
Va. Wabash	1,893,117	1.916.675	23,558	1
Wes. Md.	1,893,117 1,676,157 974,994	1 233 232	915,679	54 26
Wes. Md. W. & L. E.	950,491	2,591,836 1,233,232 1,028,722	258,238 78,231	8

^{*} November 1. † October 1.



Changes in Dollar Volume of Materials in Stock Class I Railroads
—January 1939 taken as 100

materials and supplies at the rate of consumption in August. Actually, the consumption of materials and supplies for maintenance on the railroads increased at a faster rate per month since February than the rate at which materials were received, and the aggregate consumption of new materials, exclusive of fuel, in August was approximately \$61,000,000, which was almost equal to the deliveries for the month.

CERTAIN SO-CALLED "NITRATE" RAILROADS operated by British business interests in the Province of Tarapaca, Chile, will shortly be expropriated by the government, according to "Foreign Commerce Weekly." Involving 350 route-mi., the railroads have been unprofitable for some years due to reduced nitrate mining and commercial activity in the province, and suspension of operations has been imminent. The companies had hoped the Chilean appears that the government is not anxious to make an outright purchase of a railroad system which has long since ceased to be profitable. The government has appointed a committee to fix the value of its expropriated property which will be taken over in exchange for bonds of the Chilean government.

Much Grief in Land-Grant Rates

Difficulties as to applicability on defense traffic expected to result in railroad move for complete repeal

WASHINGTON, D. C.

DIFFICULTIES which have arisen as to the applicability of land-grant rates to traffic moving in connection with the national defense program have crystallized among railroads and shippers a sentiment in favor of moving for complete repeal of the land-grant-rate law. That law was partially repealed by the Transportation Act of 1940, but the remaining provisions leave land-grant deductions applicable on "the transportation of military or naval property of the United States moving for military or naval and not for civil use," and on "the transportation of members of the military or naval forces of the United States (or of property of such members) when such members are traveling on official duty." With respect to other property or persons transported for the United States, the 1940 act stipulated, "the full applicable commercial rates, fares, or charges shall be paid."

The movement on the part of the railroads for complete repeal is arising out of their concern about potential revenue losses which might result if the views of some government agencies as to the present applicability of the land-grant deductions prevail. It is pointed out that railroad earnings are currently far below what might have been expected from present traffic, due to the fact that a large proportion of the business is government traffic on which the land-grant deductions apply. Moreover, that proportion has been increasing at an accelerated rate as more and more plants go into the production of ammunition and war supplies, and government priority policies make it difficult to secure materials for the manufacture of civilian goods. Railroadmen do not pretend to know how long this war economy will continue, but they foresee the elapse of a considerable period before there is a reversion to a normal civilian economy.

Differences as to Applicability

The aforementioned difficulties are those arising out of differences of opinion as to what the remaining provisions of the law mean, and uncertainties as to what interpretation may finally be put upon them by the courts. The differences of opinion exist not only between the railroads on the one hand and government departments on the other, but also between government departments and even between agencies within the same department.

In addition, there have been what the railroads regard as conflicting rulings by the Comptroller General's department.

In the latter connection there is the ruling issued with respect to property transported in connection with Work Projects Administration work at military or naval air fields, camps, forts, reservations, etc., which had been approved by the Secretary of War or Secretary of the Navy for ultimate military or naval use. In a February 6, 1941, letter to the Secretary of the Treasury, Assistant Comptroller General Elliott ruled that the main purpose of the projects involved was work relief, and thus the property transported in connection with them did not

qualify as military or naval property moving for "military or naval and not for civilian use."

The ruling which the railroads think is in conflict with the foregoing came in connection with materials going into the construction of the additional set of locks on the Panama Canal. In a decision dated May 7, 1941, Comptroller General Warren ruled that such materials were eligible for land-grant deductions. In this case the railroads felt that the material should not qualify because the locks will serve commercial shipping as well as naval craft. Thus the material is for "civil use." The Comptroller General's opinion took note of proposals to build the locks to accommodate commercial shipping, but asserted that no work under such plans would have been begun until about 1950. His ruling that the materials are eligible for the land-grant deductions was based on a finding that national-defense needs determined that the locks should be built at this time. As one railroad man has put it, the agitation for increasing the capacity of the canal by construction of additional locks for com-mercial purposes convinces him that this should fall within the commercial rather than the military classification, even though at times in the use of the facilities the military use might predominate.

Congress Didn't Contemplate Present Set-Up

The present situation, in the view of the railroads, is not in accord with what Congress had in mind when it enacted the partial repealer in 1940. They assert that it was never contemplated even when the original land-grant acts were passed that there would ever be the large government tonnage of today. And certainly, they add, it was not contemplated that the 1940 amendment, designed as it was to give the railroads some relief, would leave them under their present burden. Also, they point out that when the land-grant deductions were fixed by the courts at 50 per cent from the commercial rates, the operating ratio of the railroads was much lower than today's. Thus, it is argued, if 50 per cent were correct at the time it was set, it is now inadequate due to heavy increases in operating expenses.

Moreover, it is being found that the aforementioned differences of opinion as to what the remaining provisions mean is precluding any stable application pending much litigation and a final determination by the courts. The first question was that which arose over the effective date of the repeal. The Transportation Act of 1940 stipulated that the old land-grant provisions should continue to apply with respect to roads still claiming lands until such carriers "shall file" with the Secretary of the Interior a release of such claims. Some government departments are holding that the repeal provisions did not become effective with respect to the roads involved until such releases were approved by the Secretary of the Interior.

But what bids fair to become the most important question of all is whether or not the land-grant deductions are to be applied on materials shipped in connection with the lend-lease program. There has been no ruling on it as yet. The railroads contend that obviously such a tremendous movement could not have been contemplated by Congress when it enacted the Transportation Act of 1940; nothing like it had been heard of before. It is the position of the carriers that "military or naval property of the United States" was intended to relate only to property for the military and naval forces of the United States government. Certain government departments are contending, on the contrary, that lend-lease traffic should qualify for the deductions on the theory that the lend-lease program is part of the country's general defense plan.

Moreover, some agencies are contending for the application of the deductions in connection with the erection and equipping of defense plants. Such plants are generally erected out of funds advanced by one of the government agencies, but they are not operated by the government; upon completion they are leased to private companies for the manufacture of defense materials. The private companies usually obtain an option to purchase the plant within five years. This set-up seems to the railroads to be rather remote from "military or naval property . . . moving for military or naval and not for civil use." But the contentions of the government agencies are made not only with respect to materials going into the construction of the plants. Some would make the plant machinery as well eligible for land-grant deductions, while there has even been a claim that shipments of materials for houses for civilian employees of the plants should qualify.

Another matter, particularly troublesome to the railroads, is understood to be a provision written into some navy contracts for the construction of bases, etc., on a cost-plus-fixed-fee basis. That provision stipulates: "The contracting officer may, in his discretion and on behalf of the government, take possession at any place he may elect of any material procured by contractors for the purpose of transporting it to the site where it is to be used or held for further disposition and may subsequently return such material to the possession of the contractors for use. Final disposition of any surplus material shall be made as directed by the contracting officer. The title to each item of materials, articles, and supplies passes to the government when acceptance of title is duly authorized or approved by the contracting officer." The foregoing has been interpreted as permitting the navy to take title to materials before they enter transporation, and thus make such materials eligible for land-grant deductions. It is the contention of the railroads that such a course is not warranted,

because the navy is in fact buying the finished facility—not the materials which are ordinarily regarded as the property of the contractors.

Business and Government Would Benefit

Aside from the benefits which complete repeal would bring to themselves, the railroads cite also advantages from the standpoint of the shipping public and from the standpoint of the government. There is, they say, perhaps nothing in connection with the use of railroad service which causes business firms as much difficulty, uncertainty and inability properly to bid on government work as the operation of the land-grant law. Under normal conditions with commercial rates each shipper knows, in advance of any bid he may submit, the transportation charges of himself and his competitors. When bidding on government work, no shipper can know the transportation charge of his competitor and thus intelligent pricing is made most difficult. In other words. it often happens that the only ones who can evaluate bids on government work are government specialists equipped to figure what net cash rates will prevail in connection with each bid received. As a result, the railroads are convinced that land-grant rates are as obnoxious and serious to shippers as they are to the carriers. Another shipper objection comes from those whose commercial rates are competitively related. Some thus placed on a commercial parity are disadvantaged in bidding on government work if their competitors are located where they are in a position to use a larger amount of land-grant mileage.

The government, the railroads point out, would gain by repeal in that there would be a saving of the large amounts now being spent on work necessary in connection with the evaluation of bids. The present set-up, they add, has the effect of delaying unnecessarily the awarding of contracts; and frequently it is said to require the placing of contracts where there is unnecessary delay on fulfillment. Also, the land-grant deductions, giving rise as they do to disputes as to proper freight charges, are blamed for a large proportion of government expenses in connection with the auditing of freight bills. In view of the foregoing, any railroad move for com-

In view of the foregoing, any railroad move for complete repeal is expected to win substantial support from shipper organizations, while it is not thought that all interested government agencies would be in opposition. Also, organized railroad labor has favored such legislation in the past, and would undoubtedly get behind it again.



A 44-ton Diesel-electric Switcher Built by General-Electric and Powered by Two Caterpillar Engines Handling Cars on the Boston & Maine

Accidents in 1940

RAILWAY accidents of all kinds in 1940 brought death to 4,612 persons. an increase cent over 1939's all-time low of 4,362 fatalities, according to Accident Bulletin No. 109 which has just been issued by the Interstate Commerce Commission's Bureau of Statistics. Non-fatal injuries to persons in 1940 amounted to 29,950, an increase of 5.23 per cent

The Bureau points out that 1940 railway traffic as measured by train-miles was 3.68 per cent above 1939, adding that "the increase in traffic, therefore, was not quite as great as the increase in casualties and the 1940 injury and fatality rates advanced slightly over the rates for 1939."

The 1940 fatality rate was 5.28 per million train-miles, as compared with 1939's 5.17; the injury rate was 33.9 as compared with 33.4.

Train and Train-Service Accidents

In 1940, 342 persons were killed in train accidents, an increase of 128 above 1939; and the number of persons injured in such accidents was up by 134-1,556 as compared with 1,422. Last year there were 7,106 train accidents, compared with 6,074 the previous year. (Accidents resulting from the movement of trains, locomotives or cars are classified as "train" accidents if any railway property is damaged in excess of \$150; accidents arising in connection with the operation of trains, locomotives or cars that result in reportable casualties to persons, but not in damage to equipment or other rail-way property in excess of \$150, including the cost of clearing the wreck, are classified as "train-service" acci-

Train-service accidents in 1940 resulted in the death of 4,102 persons. This was an increase of 160 as compared with 1939's 3,942, the lowest of the 1930-1940 period. Meanwhile, 16,002 persons were injured in 1940 train-service accidents, an increase of 1,414 as compared with 1939. The 1940 fatalities in non-train accidents, totaling 168, were down 38 from 1939's 206; and injuries in such accidents were down from 12,109 to

12,032.

The Bulletin's chart showing the relative importance of various classes of persons involved in the 1940 fatalities from train and train-service accidents shows that trespassers constituted 44.49 per cent; persons at grade crossings, 36.63 per cent; employees on duty, 9.76 per cent; and passengers on trains, 1.69 per cent. Of the injured, employees on duty constituted 44.68 per cent; persons at grade crossings, 25.62 per cent; passengers on trains, 14.41 per cent; and trespassers, 10.05 per

Discussing fatalities to passengers, the Bulletin notes that the 82 killed in 1940 accidents represents "the largest number of passenger fatalities that has occurred in any year since 1929 when 92 were reported." It compares with the 40 passengers killed in 1939, and the 1940 fatality rate per billion passenger-miles was 3.45 as compared with 1.77 in the previous year. Of the 1940 fatalities to passengers, 66 occurred in train accidents, 14 in train-service accidents and two in nontrain accidents. Sixty-five of the 66 train-accident deaths came in two accidents—40 in a head-on collision between a passenger train and a freight train, and 25 in the derailment of a passenger train. The 1940 injuries to passengers totaled 3,344 as compared with 3,320 in

1939, and the rate per billion passenger-miles was down from 146.5 to 140.7.

A total of 533 employees were killed in 1940 accidents of all kinds, while 17,903 were injured. These were increases, respectively, of 6.81 per cent and 5.6 per cent over 1939. However, the number of employees killed per million man-hours worked remained nearly the same in 1940 as it was in the previous year-0.210 as compared with 0.207. The injury rate was likewise up but slightly, from 7.03 to 7.05. As in previous years, the Bureau calls attention to the fact that the employee casualty rates of individual roads "continue to show wide variation." A summary tabulation by districts and oc-cupational groups shows that within the Eastern district the 1940 rate for all employees ranged from 3.19 to 15.9, while the range for the transportation group embracing other than train, engine and yard employees was from "no injuries" to 16.83 per million man-hours. Another Eastern-district range which started with "no injuries" was that for the transportation group embracing yardmasters, switch tenders and hostlers. The range in the rates for all employees in the Southern district was from 3.22 to 9.89, while in the Western district it was from 2.15 to 17.26. In both of those districts the range for the yardmasters, switch tenders and hostlers group started with "no injuries." The foregoing, the Bureau suggests, "may be the result of chance variations for a single year, variation due to size of roads, and differences in the accuracy of the reports.

Additional data on employee injuries includes a table showing the actual or probable number of days of disability. On the basis of such data it is calculated that aggregate disability in non-fatal cases amounted to 797,-022 days in 1940. "At \$5 per day," the Bulletin adds, "the economic loss in time amounted to \$3,985,110."

In contrast to the upward trend in casualties in other major classes of persons, the number of trespassers killed in 1940 railway accidents was down from the previous year by 11.64 per cent, being 2,027 as compared with 2,294. "General economic conditions," the Bureau explains, "have a very strong influence upon the number of railway accidents through their effect on volume of traffic, but with respect to trespassers particularly, this influence is striking. Periods of industrial depression bring increases in the number of transients who use freight trains as a means of transportation and this increases the exposure to the hazard of accident." Figures showing a reduction of 23.99 per cent in the number of trespassers ejected from railroad premises in 1940 compared with 1939 are next given as indicating that there was less trespassing on the railroads in 1940 than in other recent years.

The 4,104 accidents at grade crossings in 1940 killed 1,808 persons and injured 4,632. As compared with the previous year the number of accidents increased 18.07 per cent, the fatalities 29.33 per cent, and the injuries 15.83 per cent. Damage to railway property (including cost of clearing wreck) in train accidents at grade crossings in 1940 totaled \$373,111. In this connection, it should be pointed out that only 267 of 1940's aforementioned 4,104 grade crossing accidents were classed as

"train accidents."

EDWARD S. FRENCH, president, Boston & Maine, was elected a life trustee of Dartmouth College, Hanover, N. H., at the annual fall meeting of the board of trustees. Mr. French was graduated from Dartmouth in 1906 with an A.B. degree and received his A.M. in 1935. He has served as trustee of the college previously

Robert E. Woodruff Elected Erie President

Beginning as a track laborer 36 years ago, he has spent his entire railway career in the maintenance of way, operating and executive departments of the Erie



Robert E. Woodruff

N October 22, Robert E. Woodruff, co-trustee and chief executive officer of the Erie, was elected president of the reorganized company. His election climaxes a career which he began in 1905 as a section laborer on the Erie. Mr. Woodruff has been cotrustee and chief executive officer of the road since October 27, 1939, and has been directly responsible for its guidance during the last two years. Under his leadership, the Erie will emerge from bankruptcy in excellent condition. A modernization program for rolling stock and roadway and track has been consistently carried forward on this road for a number of years. When all of the new freight cars which have been ordered by the Erie this year are received, 37 per cent of its freight car ownership will be less than eight years old. In addition, much of the older equipment has been rebuilt to conform with modern high-speed designs. The Erie has also continued, for a number of years, a program of laying heavy rail and installing or renewing a heavy rock ballast section.

Mr. Woodruff has been noted on the Erie for being especially active in his study of the younger men on his railway with the object of discovering latent talent and providing the maximum opportunity for those with ability and ambition and, as a result, he has built up an exceptionally efficient organization of executive and supervisory personnel.

The company which is now emerging from reorganization was incorporated in 1895 to succeed to the properties of the New York, Lake Erie & Western and during the years prior to 1920 it struggled under an excessive burden of fixed charges, against the handicaps of a relatively poor physical condition and a low credit standing.

In the early days of the Erie, it was able to meet its fixed charges, although with difficulty. The years from 1923 to 1930 were the most prosperous and in each of these years it had a surplus of from 2 to 10 million dollars. After the latter year its difficulties increased, with the result that it earned its fixed charges in only

two of these recent years. During the depression it was forced to borrow from the Reconstruction Finance Corporation as early as 1932. In the following years, additional loans were obtained from the R. F. C. and on December 31, 1938, they amounted to \$16,000,000. In 1938 the R. F. C. agreed to make an additional loan to enable the Erie to meet maturing obligations, if the Chesapeake & Ohio, which controlled the Erie through stock ownership, would guarantee the loan. Although the Erie was a strategically important unit of the Van Sweringen system, the C. & O. was unwilling to guarantee the loan, and the Erie went into bankruptcy on January 18, 1938.

During bankruptcy a number of reorganization plans were proposed, all drastically reducing capitalization and fixed charges. An Interstate Commerce Commission plan was finally approved, reducing the capitalization from \$490,953,630 to \$332,692,250 and the annual fixed charges from \$14,368,842 to \$11,827,681, including interest on the new five per cent preferred stock. Under the final plan the holders of the common and preferred stock receive one share of new common for each five shares of the old common or preferred stock and purchase warrants entitling them to buy in addition 11/4 shares of escrowed stock for each share of the old preferred or common. Under this plan, the Chesapeake & Ohio, which has had control of the road through the ownership of 55.68 per cent of the voting stock of the Erie, will receive less than 10 per cent of the new preferred and common, but can regain actual control at a cost of approximately \$40,000,000 by exercising its option to purchase the new common.

The Erie system is principally a trunk line between New York and Chicago, with little branch line mileage. It operates through a region which is densely populated and highly industrialized and has shared a generous portion of the recent increase in carloadings caused by armament activities and the general increase in business. Since 1938, its financial position has been steadily improving. In that year, its total operating revenues

amounted to only \$69,509,061. In 1939 they increased to \$81,217,363 and in 1940 to \$86,606,612. Similarly the net railway operating income increased from \$3,214,328 in 1938 to \$11,464,135 in 1939 and to \$13,853,996 in 1940. Fifty-five per cent of the revenue freight of the Erie in 1940 was products of mines, 31 per cent was merchandise, and 7 per cent was agricultural products, while animals and animal products, and products of forests each accounted for 2½ per cent and 1. c. 1. amounted to 2 per cent. In 1938, 40 per cent of its revenue freight was merchandise, 26 per cent was products of mines, 13 per cent was agricultural products, 9 per cent animal products and 3 per cent forest products.

Mr. Woodruff was born on a farm near Green Bay, Wis., on September 11, 1884, and graduated in civil engineering from Purdue University. He entered railway service in June, 1905, as a section laborer on the Erie, and thereafter served successively as a section

foreman, transitman, construction engineer, assistant division engineer, division engineer and trainmaster until March, 1909, when he was promoted to general agent, operating department, of the Chicago Terminal. He was advanced to division superintendent, with head-quarters at Rochester, N. Y., in December, 1910, and later was promoted successively to superintendent of transportation, general superintendent of the lines West, and manager of the Hornell region. On February 15, 1927, he was appointed general manager of the Eastern district, with headquarters at Hornell, N. Y., and on December 1, 1928, he was promoted to assistant vicepresident, with headquarters at New York. Mr. Woodruff was elected vice-president in charge of maintenance and operation, with headquarters at New York, on May 24, 1929, and his headquarters were later transferred to Cleveland, Ohio. On October 18, 1939, he was elected co-trustee and chief executive officer and on October 27 took over the duties of these offices.

New Books . . .

Proceedings of the 1940 Annual Meeting of the Car Department Officers' Association. F. L. Kartheiser, Secretary-Treasurer, Chief Clerk, Mechanical Department, Chicago. 288 pages. Price \$3.00.

This book contains the full proceedings of the annual meeting of the Car Department Officers' Association held at Hotel Sherman, Chicago, October 22 to 25, 1940. Included in the proceedings are two addresses made by railroad officers on the subject of car maintenance and eight technical committee reports. The technical reports are included in detail, with the discussion by the members, and cover the following subjects: Freight and passenger car maintenance; shop operation, facilities and welding; terminal handling of passenger train cars and air conditioning; inspection of freight cars and their preparation for commodity loadings; interchange and billing for car repairs; loading rules and painting. The book also contains a directory of the membership.

Proceedings of the American Wood Preservers' Association for 1941. 493 pages, 6 in. by 9 in. Illustrated. Bound in Cloth. Published by the Association, 1427 Eye street N. W., Washington, D. C. Price \$6.

Thirty-six papers and committee reports, together with the discussions that followed their presentation, are included in this volume of the proceedings of the thirty-seventh annual convention of the association, which was held in Louisville, Ky., in February. While some of the papers and reports deal with technical matters relating particularly to the wood-preserving industry, many of them are of direct interest to railway men: Among the latter are included reports on service records of lumber, marine piles, poles, posts and ties; on specifications for the pressure treatment of lumber, piles, poles, posts and timbers; on an international termite exposure test; on the painting of creosoted wood; on car lumber; and on fireproofing.

Among the papers of special interest to railway men are those on Information Obtained from Marine Piling Experiments on the Gulf Coast, by J. D. MacLean, senior engineer, Forest Products Laboratory; Kiln Drying Longleaf Southern Pine Poles, by J. G. Segelken, engineer, Bell Telephone Laboratories; Thirtyone years Experience with Treated Ties on the Lehigh Valley, by A. N. Williams, president, Lehigh Valley; Use of Treated Timber and Ties by the Louisville & Nashville, by L. L. Adams, engineer maintenance of way; and Revising Burlington Bridge Standards to Reduce Preframing of Creosoted Timber, by G. A. Haggander, assistant chief engineer, Chicago, Burlington & Quincy. Other papers containing much valuable information with respect to preservatives, treatments and the use of treated timber by the railways and in related fields are those on the Boliden preservative, composed of difficultly soluble arsenates, by Bror Häger, chemist, Bolidens Gruvaktiebolag; on biological environment in treated wood in relation to service life, by Henry Schmitz, chief and professor of forestry, University of Minnesota, Stanley J. Buckman, research department, American Creosoting Company, and Hermann von Schrenk, consulting engineer; and a comparison of preservatives in the Mississippi fence-post study, by R. M. Wirka, engineer, Forest Products Laboratory.

In addition to the foregoing, the volume includes a detailed report of the business sessions of the thirty-seventh convention; a list of all of the wood-preserving plants in the United States, Canada and Mexico; and the thirty-second consecutive annual report, for the year 1940, of the quantities of wood treated and preservatives used in the United States, prepared by R. K. Helphenstine, Jr., of the Forest Service, United States Department of Agriculture.

Locomotives of the Southern Pacific Company, by G. M. Best. 9 in. by 6 in. Bound in paper. Published by the Railway & Locomotive Historical Society. Price for members, \$1; for non-members, \$2.

This carefully documented study presents in tabular form all facts concerning some 4,000 locomotives of the Southern Pacific and its predecessor lines, which can be brought to light by research. Its author, a well-known and trustworthy student of motive power history, has combed the records of the Southern Pacific and some 75 predecessor roads to compile a monumental roster of all the locomotives which were in service on the system from 1854 to 1941 of which total approximately 2,000 are still in service.

The author, however, being an "antiquarian," is more interested in the other 2,000 locomotives, and the primary purpose of his research has been to present a picture of the locomotives of the 75 predecessor roads, their relation to the present system of numbering and their disposition. The roster is divided into three main sections: locomotives of the Atlantic system, east of El Paso, Texas; locomotives of the Pacific System, west of El Paso, Texas, and locomotives of the Southern Pacific of Mexico.

Interesting features of Southern Pacific motive power which are pointed out in the text which precedes the roster include development of an official classification system in 1904 wherein each locomotive was identified as to cylinder size, wheel dimensions, and weight on drivers in digits painted on the cab. This system was modified to the nominal classification plan in 1913, which exists today. Another interesting fact in Espee history is the fact that all locomotives ordered for the constituent roads of the Harriman system from 1904 to 1913 were of one pattern for each wheel arrangement, based on a "common standards" system of motive power design. The similarity of many classes of locomotives on the present lines of the Union Pacific and Southern Pacific is a reminder of the days when the roads were one. The book is well illustrated with many hitherto unpublished photographs.

NEWS

Truckers Don't Want Govt. RRs

Ted Rodgers says it's impossible for truckmen to compete with socialized railways

That the Interstate Commerce Commission be empowered by legislation to use "the big stick" on local restrictions on sizes and weights of motor trucks was urged by the Policy committee of the American Trucking Associations during the eighth annual convention of the organization in New York, October 26 to 30, inclusive. Representing more than 30 states, the committee pointed to lack of unity in laws affecting sizes and weights of trucks as a major barrier to highway transportation of defense materials and took the position that delays in defense production will occur unless the truckers be given the privileges they demand. The committee endorsed a policy that the I. C. C. be set up as a clearing house to which complaints by the truckers on local restrictions may be sent. The regulatory body should then, so the truckers argue, be empowered to order local authorities to end their ban on certain sizes and weights, and should such orders be disregarded, the I. C. C. would have the power to act as "a compelling agent."

In his annual report to the 2,500 delegates to the convention from points as far as Hawaii and Alaska, President T. Rodgers gave it as his opinion that if the government takes over the railroads the independent motor carrier is doomed. To forestall possible government intervention. he said, the transportation industry as a whole must perform so efficiently that government intervention would be unjustifi-"The ability of the motor freight industry to carry its share of the burden depends," the ATA chief declared, "upon the willingness of truck operators to make the sacrifices which they undoubtedly will be called upon to make when the chips are down."

Expanding on the effect of government ownership of railroads, Mr. Rodgers said: "It is conceivable that the government might take over the railroads and leave the motor freight industry under private control. Such a development would doom the independent motor carrier just as it has done in foreign countries where government ownership or control of railroads has taken place. We would find it impossible to compete with transportation facilities operated by the government itself."

C. N. R. Chief Sees Green Light for Dominion Railways

The Canadian railways are not worrying about their ability to handle present or prospective traffic. R. C. Vaughan, C. N. R. president, this week stated that, while deliveries of new equipment are slow, nevertheless they are coming along—because the Ottawa government has given the carriers priorities pretty close to the top of the list, right after munitions and ships.

There has been no shortage of labor, the C. N. R. executive said, and none is expected; the company's apprentice training system has stood it in good stead in this respect. No labor difficulties have been experienced, the cost-of-living bonus safeguarding the employees against any undue hardship from increased prices.

He predicted that the C. N. R. will this year earn net operating revenues of upwards of 66 million dollars, the highest in history; and more than sufficient to cover taxes and the interest on the government road's securities which are held by the public.

Reporting to the membership on the legislative record of the year which is drawing to a close, the speaker pointed out that 18 states approved bills liberalizing truck size and weight requirements; 14 other states turned down such legislation; 7 states rejected bills to tighten size and weight requirements; 14-states considered and rejected legislation to prohibit carover-cab or double-deck operations by automobile transporters; 14 states rejected bills limiting gallonage transported by gasoline tank trucks and 10 states rejected bills to prohibit operation of trucks on week-ends and other holidays. Further, said he, 17 states enacted legislation providing for "reciprocity" or liberalizing "reciprocity" statutes already in effect; two states rejected restrictions of present reciprocity agreements.

Commenting on revenues and expenses, the A. T. A. president pointed out that truck-loads are running 30 to 35 per cent ahead of last year, but added that increased revenues are not keeping pace with rising expenses. He declared that, in many instances, increased business, instead of swelling net income, has actually reduced it "to the point where a large number of (Continued on page 722)

Car Service Division is pleased with progress to date, but is not resting on oars

How Car Economy

Is Working Out

Prospects for protecting 1942 transportation requirements "appear favorable," provided "the necessary steel and other materials needed in car construction are made available," according to the Car Service Division's annual report which is now being distributed. With respect to equipment utilization the report cites the new high record of 37.7 tons set in 1940 as the average tons per car of carload freight, adding that few of the many existing opportunities for increasing the available car supply "are more promising than gains which are possible through loading more tons in each car." Moreover, "few present so definite an opportunity for economies in operating expenses"; and "it is confidently predicted that the tons per car for 1941 will reflect an appreciable increase over the 1940 record."

The report's foreword notes how the Division has been concentrating "on car efficiency methods to get the utmost service out of all available equipment.' fact that there has been "no shortage of cars or power" during the past year is called "a record of achievement for the railroads, giving due credit to the splendid cooperation extended by the shipping public and representatives of the government." Car loading figures and fourth-quarter estimates of the Regional Shippers' Advisory Boards lead the Division to believe that loadings during the 13-week period beginning October 1 "should average approximately 850,000 cars, with a possible peak not exceeding 950,000." Next comes a reference to the 92,033 freight cars on order September 1, followed by the aforementioned statement of the need for making materials available to builders.

Among the new car handling problems presented by the defense program has been the increase in transcontinental traffic by reason of the removal of boats from the intercoastal water service. Also, many Atlantic and Gulf of Mexico coastwise boats have discontinued operations. The appropriation of billions of dollars for government and defense projects scattered throughout the country "has created new channels of movement, some of which require special equipment." Although, movement of traffic under the lend-lease pro-

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9 Mo. Net Income Was \$358 Million

Net railway operating income was \$753,939,880, a 4 per cent return

Class I railroads in the first nine months of this year had an estimated net income, after interest and rentals, of \$358,582,763, as compared with \$58,598,060 in the corresponding period last year according to the Bureau of Railway Economics of the Association of American Railroads. The nine-months net railway operating income, before interest and rentals, amounted to \$753,939,880, a four per cent return, as compared with \$444,493,892 or 2.38 per cent

Operating expenses totaled \$312,286,923 compared with \$260,239,661 in the same month of 1940, and \$316,494,334 in September, 1930.

Class I roads in the Eastern district in the nine months had an estimated net income of \$205,789,975 compared with \$90,-153,924 in the same period last year. Those same roads had a nine-months net railway operating income of \$370,915,833, or 4.08 per cent, compared with \$258,968,333 or 2.89 per cent in the same period in 1940, and \$341,178,879 or 3.86 per cent compared with 1930. Gross in the Eastern district in the nine months totaled \$1,936,731,463, an increase of 23 per cent compared with the same period in 1940, but a decrease of per cent compared with the same nine months in 1930; operating expenses totaled \$1,289,351,165, an increase of 15.9 per cent above 1940, but a decrease of 13.7 per cent

Forwarder Bill Passed by House

Bill differs from one Senate okayed, so conferees will have to harmonize them

The House of Representatives on October 23 passed its committee on interstate and foreign commerce's version of S. 210, the Senate-approved bill which would enact a new Part IV to the Interstate Commerce Act for the regulation of freight forwarders by the Interstate Commerce Commission. Action by the House came without a record vote after about two hours of debate, the bill having been called up under a unanimous consent agreement obtained by Chairman Lea of the committee on interstate and foreign commerce.

No attempt was made to amend the measure on the floor, and thus it came from the House in the form in which it was reported by the House committee. Congressional action will not be completed, however, until differences between the House and Senate version are ironed out in conference. Those differences were outlined in the Railway Age of August 23,

page 322.

House debate on the bill was opened by Chairman Lea, and most of the subsequent speakers were his colleagues on the committee on interstate and foreign commerce. Asserting that the freight for-warder has become "an accepted part of the transportation system of the United States," Mr. Lea went on to say that the necessity for action on the bill arose out of a court decision "holding in effect that freight forwarders have neither the rights nor the burdens of a regulated transportation agency." His reference was to the action of the Supreme Court, upholding the Interstate Commerce Commission's decision which held that Acme Fast Freight, Inc., was neither a motor carrier nor a broker under Part II of the Interstate Commerce Act. In that case and another the commission has issued orders (not yet effective) requiring the discontinuance of joint-rate arrangements between forwarders and motor carriers.

In the latter connection Mr. Lea explained that the House bill provides for assembly and distribution rates to be published by carriers as substitutes for the condemned joint-rate arrangements; and, meanwhile, the latter would be permitted to remain in effect for a transition period of 18 months. The Senate version likewise called for cancellation of the joint-rate arrangements, but it also required that forwarders pay the regularly-published

tariff rates of the carriers.

Discussing the attitude of interested parties, Mr. Lea said that the forwarders do not like some provisions of the bill; but "they are willing to leave that to conference." The National Industrial Traffic League favors the bill; and many trucking associations are for it, "especially the smaller truckers." American Trucking Associations, Inc., objects to the absence from the House bill of that minimum-rate provision of the Senate version which would

CLASS I RAILROADS—UNITED STATES Month of September

	1941	1940	1930
Total operating revenues	\$488,978,900	\$382,714,515	\$462,209,448
	312,286,923	260,239,661	316,494,334
Total operating expenses	63.87	68.00	68.47
Operating ratio—per cent			
Taxes	61,273,611	37,391,755	31,238,205
Net railway operating income (Earnings before			
charges)	104,070,310	74,715,435	102,852,390
Rate of Return on property investment	3.45	2.50	3.39
Net income, after charges (estimated)	59.300.735	30,732,608*	******
		00,102,000	
Nine Months Ended			
Total operating revenues	\$3,892,523,030	\$3,126,853,492	\$4,035,083,343
Total operating expenses	2,614,576,044	2,287,726,170	3,018,212,919
Operating ratio—per cent	67.17	73.16	74.80
Taxes	422,959,397	296,313,791	271,435,608
Net railway operating income (Earnings before	422,737,376	2,0,010,771	27 1,400,000
	#F2 020 000	444 402 000	648,115,287
charges)		444,493,892	
Rate of Return on property investment	4.00	2.38	3.44
Net income, after charges (estimated)	358,582,763	58,598,060*	

* Net Income not reported monthly prior to 1932.

in 1940 and \$648,115,287 or 3.44 per cent in 1930.

The September net income was \$59,300,-735 compared with \$30,732,608 in September, 1940, while net railway operating income for that month was \$104,070,310, a 3.45 per cent return compared with \$74,-715,435 or 2.5 per cent in the same month of 1940 and \$102,852,390 or 3.39 per cent in September, 1930.

Total operating revenues in the nine months of 1941 were \$3,892,523,030, compared with \$3,126,853,492 in the same period in 1940, and \$4,035,083,343 in the first nine months of 1930, an increase of 24.5 per cent in 1941 above 1940, but 3.5 per cent below 1930. Operating expenses amounted to \$2,614,576,044, compared with \$2,287,726,170 in the corresponding period in 1940, and \$3,018,212,919 in the same period in 1930—14.3 per cent above the former, but 13.4 per cent below the like period in 1930.

Class I roads in the nine months paid \$422,959,397 in taxes, compared with \$296,-313,791 in the same period in 1940, and \$271,435,608 in the same period in 1930. For September alone, the tax bill amounted to \$61,273,611. an increase of \$23,881,856 or 63.9 per cent above September, 1940. Twenty-seven Class I roads failed to earn interest and rentals in the nine months, of which seven were in the Eastern district, two in the Southern district, and 18 in the Western district.

Gross for September totaled \$488,978,900 compared with \$382,714,515 in September, 1940, and \$462,209,448 in September, 1930.

under 1930.

The Eastern-district net income for September was \$29,425,884 compared with \$17,052,313 in September, 1940; net rail-way operating income amounted to \$47,636,979 compared with \$35,777,146 in September, 1940, and \$43,450,802 in the same month of 1930.

Class I roads in the Southern district in the nine months had a net income of \$55,-306,173, compared with \$308,861 in the same period last year. Those same roads had a net railway operating income of \$104,-449,124, or 4.6 per cent, compared with \$50,369,673 or 2.22 per cent in the same period of 1940, and \$63,017,348 or 2.6 per cent in 1930. Operating revenues in the Southern district in the nine months totaled \$506,264,967, an increase of 28 per cent compared with the same period in 1940, and an increase of three per cent compared with the same nine months in 1930. Operating expenses totaled \$337,986,288, an increase of 12 per cent above 1940, but a decrease of 13 per cent under 1930.

September's net income in the Southern district was \$6,734,093 compared with \$1,-649,332 in September, 1940; net railway operating income amounted to \$12,760,199 compared with \$7.545,486 in September, 1940, and \$8,827,060 in the same month of 1930.

Class I roads in the Western district in the nine months had a net income of \$97,486,615 compared with a deficit of \$31,864,725 in the same period last year. Those same roads in the nine months of

(Continued on page 719)

prohibit publication by a forwarder of a rate "lower than the lowest rate published by any carrier or carriers subject to this act whose facilities are used. . . ." To provide such a rule, Mr. Lea said, would "deprive the Interstate Commerce Commission of its discretionary power in fixing rates."

Questioning of Mr. Lea brought out how the House bill would permit railroads and other carriers to conduct forwarding operations through subsidiary companies; and also that the Senate bill had a long-and-short-haul clause, whereas the House version has none. The House bill's exemptions relieves from regulation a forwarder of "a single general commodity"—a provision which Mr. Lea does not like. Concluding his remarks, the chairman presented letters from the Secretary of War and Acting Secretary of the Navy as "indicating the practical value and necessity of preserving forwarder service."

Representative Wolverton, Republican of New Jersey, ranking minority member of the committee, followed Chairman Lea, and presented a comprehensive explanation of the bill and a review of conditions which led to the demand for forwarder regulation. In the course of his statement Mr. Wolverton said: "The plain fact is that it has not as yet been demonstrated to what extent the ascendency of forwarders of the modern type has been due to the expedited, co-ordinated service which they provide, and to what extent to their freedom from regulation and to their ability, through community of interest or control of immense traffic, to secure unjustified concessions and favored treatment from the carriers whose services they utilize. Necessarily this question cannot be resolved until freight forwarders are subject to as nearly equal regulation as their peculiar nature will reasonably permit."

With respect to the provisions permitting carriers to control forwarders, Mr. Wolverton said there would be no discrimination in rates-any more than there is when a railroad - controlled express company maintains rates different from the railroads on the same articles between the same There is a provision in the House points. bill which stipulates that where a carrier controls a forwarder no rate or practice of such forwarder shall be held unlawful because of its relationship to a common carrier. Moreover, Mr. Wolverton went on, "it is fundamentally unfair to deny to a common carrier that has invested its money in transportation facilities the right to use those facilities to serve the public upon as favorable a basis as any forwarder can use them."

Among other committee members discussing the bill was Representative Halleck, Republican of Indiana, who referred to the way in which the national-defense emergency is involved. He mentioned letters he had received from the War and Navy departments, "dwelling upon the importance of this forwarder service in the present situation, with reference to subcontracting all over the country and also the delivery of war materials as well as parts of airplanes." Also, Mr. Halleck noted that the House bill "specifically provides that no person shall be prevented from going into the forwarder business simply because

somebody else is in the business." In other words, there is no "grandfather" clause nor requirement that certificates be obtained, provisions found in the Senate version. This feature of the House bill, Mr. Halleck said, marked "the first time this principle has been written in legislation." From time to time throughout the discussion, Representative White, Democrat of Idaho, broke in to complain about what he regarded as restrictive provisions of the bill.

N. I. T. League Luncheon to Be Held November 13

The annual luncheon of the National Industrial Traffic League will be held at the Palmer House, Chicago, on November 13, coincident with the annual meeting of the league. Ernest E. Norris, president of the Southern, will be the speaker.

Budd Names Port-Traffic Consultant

Ralph Budd, defense transportation commissioner, has appointed George C. Randall as consultant on port clearances. Mr. Randall will handle problems arising from the movement of defense traffic, including lend-lease materials. Since 1939 he has been manager of port traffic for the Car Service Division, Association of American Railroads.

Pipe Line Case Re-opened

The Interstate Commerce Commission has reopened for further hearing the proceeding wherein its order of last December requires pipe line common carriers earning over eight per cent on their property valuations to show cause why an order should not be entered requiring rate adjustments calculated to reduce their earnings to the eight per cent basis. The case is docketed as No. 26570, Reduced Pipe Line Rates and Gathering Charges, and the commission's decision was reviewed in the Railway Age of January 11, page 146.

U. S. Supreme Court Order

The United States Supreme Court at its October 20 session denied a petition of the Chicago, North Shore & Milwaukee for a review of an Interstate Commerce Commission finding that the line and its employees are subject to the Railway Labor Act, the Railroad Retirement Act, and the Carriers' Taxing Act. The lower court had held that the commission had authority, about 15 months after it rendered a decision that the interurban railway was exempt from the Railway Labor Act, to reopen the proceeding, upon the request of an employee organization under the Railway Retirement Act of 1937 and of the Internal Revenue Commissioner under the Carriers Taxing Act of 1937, and to reverse its decision by holding that the company was subject to the Railway Labor Act as a part of the general steam-railway system of transportation.

September Export Traffic

Cars of export freight, other than grain or coal, unloaded at Atlantic, Gulf and Pacific ports in September totaled 56,249 cars, the largest number unloaded in any one month since the compilation of these statistics began in November, 1939, according to reports compiled by the Manager of Port Traffic and made public by the Association of American Railroads.

This exceeded by 238 cars the previous high record established in August this year. In September 1940, there were 50,206 cars unloaded. Cars of grain for export unloaded in September this year at these ports totaled 3,587, compared with 633 in the same month last year. "No congestion or delay to traffic exists at any of the Atlantic, Gulf or Pacific ports, due to the cooperation of steamship lines, port authorities, exporters and shippers," the A. A. R. statement said.

Service Pulled Off After 88 Years

The final chapter of the Louisville & Nashville's passenger service between Maysville, Ky., and Paris was written on October 25 when trains 139 and 140 made their last runs. Service between these points was started by the Kentucky Central on October 6, 1853. The lines patronage fell off in the last few decades as passengers and mail turned to buses but the division enjoyed a brief revival during the 1937 Ohio river flood when no other public carriers could reach Maysville.

Burlington Considers Purchase of Illinois Terminal

The Chicago, Burlington & Quincy is making a survey incident to the possible purchase of the Illinois Terminal which operates steam powered freight service between St. Louis, Mo., Alton, Ill., Springfield, Peoria and Danville; and electric interurban service between Springfield and Danville; Peoria and St. Louis; Peoria and Decatur; Grafton and Alton; and St. Louis and Alton.

Servicemen's Canteen to Be Opened in Chicago Union Station

A servicemen's canteen to be used by soldiers, sailors, marines and members of the coast guard in uniform will be opened in the Union Station, Chicago, on November 11. Sandwiches, soft drinks, light refreshments, cigarettes tobacco, toilet articles, films and other items will be sold at cantonment canteen prices. The canteen is sponsored by the Chicago Union Station Company; the Pennsylvania; the Chicago, Burlington & Quincy; the Chicago, Milwaukee, St. Paul & Pacific and the

Club Meetings

The Southern and Southwestern Railway Club will hold its next meeting at the Ansley hotel, Atlanta, Ga., on November 20 at 10 a. m. A. F. Stuebing, development engineer, Carnegie-Illinois Steel Corporation, Pittsburgh, Pa., will present a paper entitled "Light Weight Equipment," illustrated by slides.

The Northwestern Carmen's Association will hold its next meeting on November 3 at the North Central Commercial Club, St. Paul, Minn. Charles R. Busch, vice-president, Unit Truck Corporation, will present an illustrated paper on the "Mechanics of and Handling of the Unit Truck in Interchange."

The Traffic Club of Newark, N. J., will

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hold its annual meeting and installation of officers at the Robert Treat hotel, Newark, on Monday, November 3, at 6:30 p. m.

The 20th annual dinner of the New Jersey Industrial Traffic League will be held at the Robert Treat hotel, Newark, N. J., on Thursday, November 27.

C. & E. I. and Pennsylvania Name Florida Trains

The "Dixiana" and the "Jacksonian" are the names selected by the Chicago & Eastern Illinois and the Pennsylvania respectively for the trains which they will add to their Chicago-Florida service this season under a pooled plan of operation as reported in the Railway Age of September 20, page 453. The Dixiana will be placed in operation on January 1 and will depart from Chicago every third day at 8 p. m. The Jacksonian will be placed in operation on December 18 and will depart from Chicago every third day at 9 a. m.

Popular Biography Describes Life of George Verity

The story of George M. Verity and his associates in organizing and administering the American Rolling Mill Company is told in a new informal biography entitled "True Steel" by Christy Borth (Bobbs-Merrill Company, \$3). Heightened by conversation pieces and anecdotes, the book stresses the successes of Mr. Verity in human relations, for which his firm stood out in the country's "most hard boiled business"—steel. The history of "Armco" and Middletown, Ohio, which it practically created, are also told along with the life of their leader.

Would Require Carriers to Issue Passenger Receipts

Representative Rankin, Republican of Montana, has introduced in the House H. R. 5914, which would require all carriers subject to parts I, II, or III of the Interstate Commerce Act, and any air carrier subject to the Civil Aeronautics Act of 1938 to issue receipts for all moneys paid for passenger transportation. The bill specifically provides that all carriers shall issue a permanent receipt for all fares paid, designating any amount paid as taxes.

Any carrier which failed to issue such a receipt would be subject to a fine of \$50 for each offense.

President Approves New Lease-Lend Measure

President Roosevelt has signed H. R. 5788, the new lend-lease bill. As pointed out in the Railway Age of October 11, page 591, the measure includes an item of \$25,000,000 for railway equipment and facilities to be used in the Middle East "theatres of war." Hearings on the bill before the Senate appropriations committee, which were made public this week, fail to show any reference to this item in the upper house committee discussions.

The bill also includes an item of \$69,385 for the National Mediation Board. Some \$55,000 of this amount will be used to reimburse the board's arbitration-and-emergency-boards account, from which will

come funds to pay the expenses of the five-man emergency board now considering the wage-increase demands. The \$14,385 item will enable the board to employ two additional mediators and provide additional funds for travel expenses.

I. C. Inaugurates Two-Car Train, Land O' Corn

A new high speed two-car streamlined train, named the Land o' Corn, was placed in service by the Illinois Central on October 26 between Chicago and Waterloo, Ia., on a schedule of 5 hr. 25 min. for the 275 miles or 134 hr. below the present fastest schedule. The train has a capacity of 109 passengers. One car is equipped with two and the other with one 225 hp. Diesel engines. Power is delivered to the wheels through the hydraulic transmission.

The train leaves Waterloo at 7 a. m. and arrives in Chicago at 12:25 p. m. Returning on the same day it leaves Chicago at 5.15 p. m. and arrives in Waterloo at 10:45 p. m. Stops are made at Rockford, Freeport, Dubuque, Manchester and Independence.

American Locomotive Co. to Pioneer New 28-ton Tank

A closeup view of the production of the 28-ton M-3 medium tank was afforded during a "Defense Day" inspection of the American Locomotive Company's Schenectady, N. Y., plant on October 28. W. C. Dickerman, chairman, disclosed that the company had been asked by the government to pioneer a new 28-ton M-4 tank, incorporating certain improvements in body construction and gun mountings and using a Diesel instead of a gasoline engine. The company's original committment called for production of these tanks at the rate of one and one-half per day. Production has been stepped up to two a day and arrangements made to increase this output to three a day.

In addition to its Schenectady plant, the American Locomotive Company maintains defense production in plants at Auburn and Dunkirk, N. Y.; Richmond, Va.; Latrobe, Pa.; Chicago Heights, Ill.; and

Montreal, Canada. The Montreal locomotive works, subsidiary of the company, recently completed the largest tank arsenal in Canada, equipped to produce five or more M-3 medium tanks per day.

Defense materials produced by the Company include Scotch marine boilers for the British, heavy marine forgings, 155 mm. and 105 mm. gun carriages, condensers, marine Diesel engines, fragmentation bombs, springs and warship gun turret parts.

N. & W. Places New Coaches in Service

The Norfolk & Western placed 15 new streamlined passenger coaches in service last week. The new cars first made their appearance on the westbound run of the "Pocahontas" from Norfolk, Va., to Cincinnati, Ohio, on October 21 and on the astbound run from Cincinnati on October 22. The cars were also placed on the "Cavalier" between the same points.

Built by the Pullman-Standard Car Manufacturing Company, at a cost of more than \$1,000,000, the new cars are 85 ft. long, coupler to coupler, and seat 60 persons. The interior of the cars are done in a striking color scheme in variations of blue and green. Seats are upholstered in shades of tomato red. Colored photo-murals, at each end of the cars, depict scenes along the road. The exteriors are painted a bright Tuscan red, with gold line trimming.

Status of Ore-Train Operators

Passing upon petitions of railway labor organizations, the Interstate Commerce Commission, Division 3, has found that it is without jurisdiction to determine whether the Nevada Consolidated Copper Corporation or the Nevada Northern Railway Company is the employer within the meaning of the Railway Labor Act of engineers, firemen, conductors, and brakemen employed solely in the operation of ore trains between Ruth, Nev., and McGill.

In support of its disclaimer of jurisdiction the Division cited the full commission's recent decision in the case involving the status of foremen, assistant foremen



Visitors View New 28-Ton Tank in Yard of American Locomotive Company's Schenectady, N. Y., Plant During "Defense Day" Inspection, October 28

and laborers of a contractor on the ore docks of the Northern Pacific at Superior, Commissioner Patterson dissented as he did in the ore-dock-workers case which was reviewed in the Railway Age of October 25, page 683.

Retirement Board Reports September Operations

Benefits under the Railroad Retirement Act in September totaled \$10,463,839, bringing total payments from the beginning of operations to \$461,410,783. During this period the Railroad Retirement Board certified 149,398 employee annuities, 48,537 pensions, 3,060 survivor annuities, 5,878 death benefit annuities, and 45,884 lumpsum benefits.

Employee annuities in force at the end of September totaled 121,066, with a monthly amount payable of \$7,961,285. average monthly payment was \$65.76. lections under the Carriers Taxing Act in July-September, 1941, amounted to \$37,-620,072, or 6.1 per cent more than for the preceding quarter and almost 17 per cent more than for the corresponding quarter

of the preceding year.

Claims received under the Railroad Unemployment Insurance Act totaled 28,882 in the four-week period from August 30 to September 26, and benefits certified amounted to nearly \$562,000, of which \$546,625 was for claims in the current benefit year. The average certification on claims with a maximum of 10 compensable days was \$22.91. In the four September weeks, the employment offices were notified of 4,359 openings, approximately 4,200 of which were with railroad employers. Referrals were made of more than 5,300 qualified persons, and 2,380 were placed.

Car Companies Are Fined for Rebating

The North American Car Corporation, the Inland Car Lines, Inc., and Martin J. Grogan have entered pleas of guilty to "informations" charging violations of Section 1 of the Elkins Act in the United States District Court for the Western District of Louisiana at Shreveport, La., according to an announcement on October 27 by the Interstate Commerce Commission. The Court assessed fines of \$20,000 against North American, \$5,000 against Inland, and \$10,000 against Mr. Grogan.

According to the information received by the commission, North American, a private car company, granted rebates to the Hurricane Petroleum Corporation, an oil shipper now bankrupt, through the payment to the shipper of excess mileage earnings on tank cars leased by the shipper from North American, while Inland followed the same practice with regard to the Rodessa Oil & Refining Corporation, an oil shipper which is also now bankrupt. Mr. Grogan, as president of the two corporate shippers, was charged with soliciting and receiving rebates from the private car companies.

The commission announcement went on to point out that the excess mileage earnings paid by the car companies to the shippers were derived from mileage allowances for the use of the leased tank cars paid by the railroads to the car companies, and that the amounts subsequently paid by the car companies to the shippers were substantially in excess of the rentals paid by the latter for the leased cars.

Freight Car Loading

Loading of revenue freight for the week ended October 25, totaled 913,605 cars, the Association of American Railroads announced on October 30. This was a decrease of 9,279 cars, or one per cent, below the preceding week, but an increase of 75,948 cars, or 9.1 per cent above the corresponding week in 1940, and an increase of 84,247 cars, or 10.2 per cent, above the same week in 1939.

As reported in last week's issue, loadings of revenue freight for the week ended October 18, totaled 922,884 cars, and the summary for that week, compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For Week E	inded Satur	day, Octobe	r 18
Districts	1941	1940	1939
Eastern	185,621	161,564	173,421
	196,086	165,627	172,261
Pocahontas	59,363	46,416	57,274
	129,441	112,073	119,055
Northwestern	146,240	139,565	135,737
Central Western	144,479	131,288	138,555
Southwestern	61,654	57,376	59,986
Total Western Districts	352,373	328,229	334,278
Total All Roads Commodities	922,884	813,909	856,289
Grain and grain product	37,564	36,742	44,578
	22,805	22,359	21,581
Coal	167,613	120,689	165,236
	13,042	11,699	11,620
Forest products	46,317	41,412	39,231
Ore	68,808	69,728	62,533
Merchandise l.c.l.	159,285	158,789	160,298
Miscellaneous	407,450	352,491	351,212
October 18	922,884	813,909	856,289
October 11	903,877	811,906	839,952
	917,516	806,004	830,102
September 27	919,510	822,434	829,696
September 20	907,969	813,329	809,752

Cumulative Total, 42 Weeks ... 34,007,761 29,021,859 26,812,287

In Canada.—Carloadings for the week ended October 18 totaled 65,406, compared with 68,043 for the previous week and 58,931 for the corresponding week last year, according to the compilation Dominion Bureau of Statistics.

	Cars Loaded	Rec'd from
Total for Canada:	200000	
Oct. 18, 1941	65,406	32,271
Oct. 11, 1941	68,043	30,865
Oct. 4, 1941	68,033	32,191
Oct. 19, 1940	58,931	26,070
Cumulative Totals for Canad	da:	
Oct. 18, 1941 : 2	2,537,579	1,240,626
Oct. 19, 1940 2	2,232,311	1,027,072
	2,021,996	885,323

Shippers Boards Forecast 1940 Carloadings Within 0.1 P. C.

The 1940 carloading forecasts of the 13 regional shippers advisory boards were within one-tenth of one per cent of being accurate for the nation as a whole, according to Warren C. Kendall, chairman, Car Service Division, A. A. R. The boards' combined estimate last year for the 29 basic commodities was 23,334,103 cars, while the actual loadings of these commodities totaled 23,302,603 cars-31,500 cars less than the forecast. This represents an over-estimate of 0.1 per cent.

It will be noted that the accuracy gage used by Mr. Kendall compares the year's estimate of all the boards with the year's

actual carloadings. Actually the boards make their forecasts individually on a quarterly basis and the percentage of deviation of these quarterly forecasts from actual quarterly loadings show, on the average, a higher degree of inaccuracy, for the reason that a comparison of joint yearly figures tends to cancel extremes. The percentage of deviation from actual loadings of individual boards' quarterly forecasts in 1940 ranges from .1 per cent to 15.5 per cent.

"In view of the many uncertainties now confronting the commodity committees of the boards which prepare these quarterly estimates," Mr. Kendall commented "the The showing is indeed remarkable. record of consistent accuracy made by these boards in their carloading predictions has resulted in the acceptance of the forecasts by the railroads, government and business generally as one of the best barometers of

business trends."

Greater Production Is Goal of **Development Association**

Greater agricultural and industrial production to meet the demands of national defense was the major problem discussed at the thirty-third annual meeting of the American Railway Development Association at Chicago on October 27-29. Because members of the association are so closely associated with the work of the various departments of the government, defense activities occupied a prominent place on the program. Colonel Donald Armstrong, executive officer of the Chicago Ordinance District, told a luncheon meeting attended by members of the Traffic Club of Chicago, that the heavy volume of defense materials that have been carried by the railroads are nothing compared with what they will be called upon to handle when the finished products for the United States and the lend-lease program begin to come off the production lines in quantities. He estimated that shipments of this character from the Chicago district alone will average 400 carloads a week within less than a year and that this traffic will be supplemented each week by L. C. L. shipments, the freight charges of which will average \$15,000 a week.

D. A. Fitzgerald, of the Department of Agriculture, cited the need for more milk He urged an increase in the and eggs. number of chickens and cows and scientific feeding as a means of increasing produc-

Officers elected for the ensuing year are as follows: President, J. M. Hurley, agricultural and industrial agent of the New York, Ontario & Western; first vice-president, Earle G. Reed, general live stock agent of the Union Pacific; second vicepresident, E. J. Leenhouts, general agricultural representative of the New York Central; and secretary-treasurer, H. C. Millman, industrial agent of the Pennsylvania.

Others discussing the national situation included Robert S. Henry, assistant to the president of the Association of American Railroads, who outlined the ability of the railroads to handle future traffic; Major R. H. Eury, traffic manager of the Chicago Ordinance District, who spoke on

Transportation's Place in the Defense Program; Leverett S. Lyon, chief executive officer of the Chicago Association of Commerce, who spoke on The Defense Program in the Chicago Area; and J. A. McConnell, general manager of the Cooperative Grange League Federation Exchange, who discussed Monopoly by Labor.

Motor Carriers' September Freight Volume Tops All Records

"Smashing all previous records," the volume of revenue freight transported by motor truck in September increased 2.2 per cent over August, and 27 per cent over the volume hauled in September, 1940, according to American Trucking Associations

Comparable reports were received by ATA from 226 motor carriers in 39 states. The reporting carriers transported an aggregate of 1,628,173 tons in September, as against 1,593,568 tons in August, and 1,281,577 tons in September, 1940. The A. T. A. index figure, computed on the basis of the average monthly tonnage of the reporting carriers for the 1938-1940 period as 100, was 161.16 for September, as compared with August's 157.7.

Slightly more than 80 per cent of all the tonnage transported in the month was reported by carriers of general freight. The volume in this category increased 2.1 per cent over August, and 30.4 per cent over September of the previous year. Transporters of petroleum products, accounting for six per cent of the total tonnage reported, showed a decrease of 7.8 per cent under August, but held 36.3 per cent over September, 1940. Movement of new automobiles and trucks constituted approximately three per cent of the total, and increased 43.2 per cent over August, when the factories were shut down for remodeling, but the volume still was 27.7 per cent under that of September last year. Haulers of iron and steel products reported a little more than four per cent of the total tonnage; the volume of these com-modities decreased 11.8 per cent under August, but increased 6.3 per cent over September, 1940. Almost six per cent of the total tonnage reported was miscellaneous commodities, including tobacco, milk, textile products, building materials, cement and household goods. Tonnage in this class increased 12.4 per cent over August, and 42.6 per cent over September,

Quebec Truckers Challenge C. P. R. on Truck Routes

A decision of possible great importance to the Canadian railroads, because it may affect their right to use the highways of the various provinces of the Dominion, will be forthcoming in an action which was initiated in the Police Court at Montreal, Que., on October 24 by the Quebec Truckers Syndicate against the Canadian Pacific Express Company, a C. P. R. subsidiary. The syndicate takes the position that railroads operating trucks in freight service should be classed as any other type of truck operator and be placed under the obligation of obtaining route permits (certificates of convenience and necessity) from the Quebec Public Service Board. Should the

position taken by the syndicate prevail, Canadian railroads would presumably have to withdraw most of their trucking services in the province which go beyond the limits of a drayage service, since almost all likely truck routes are already operated under permits by independent operators.

The railroads are presently operating trucks—the C. P. R. through its express affiliate—under a federal law which permits a railroad to complete a freight movement beyond its own rails by highway. They do not possess provincial permits on a large number of the routes over which they operate. The private truckers maintain that, properly interpreted, the federal law permits the railroads to use trucks only for pick-up and delivery within municipalities. It does not mean that freight shipped from, for illustration, Toronto, Ont., to St. Jerome, Que., may be brought to Montreal by railroad and then trucked over the road to St. Jerome.

The court action raises a constitutional issue also—whether the power of the provincial legislature embodied in the public service board may interfere with inter-provincial carriage of freight. It is pointed out that the provinces heretofore have not had the right to prevent a railroad from laying its tracks to any part of the province if the carrier had secured a federal charter. On the other hand the fact that the provinces build and maintain the principal highways may void any similarity between the two cases.

Will Direct Transport Board's "Economy and Fitness" Study

Arthur M. Stevens, until recently traffic manager and a director of the Standard Oil Company of Kentucky with headquarters at Louisville, Ky., has been selected by the Board of Investigation and Research created by the Transportation Act of 1940 to be the director of its researches into the relative economy and fitness of carriers by rail, motor, and water. The announcement of Mr. Stevens' appointment confined his assignment to the foregoing of the three specific investigations which the Board is called upon to make and thus presumably there will be other directors appointed for the studies of the extent to which carriers have been subsidized by the government, and the extent to which taxes are imposed upon carriers.

A native of Kentucky, Mr. Stevens began his transportation and traffic career with the Louisville & Nashville in 1908, and served in various capacities with that road until 1917, when he became assistant chief of the Southern's tariff bureau at Atlanta, Ga. In 1918 he entered industrial traffic work with the Standard Oil Company of Kentucky, becoming traffic manager in 1922. The Board's announcement said that Mr. Stevens is "widely known in the petroleum industry and in traffic circles, having had some 25 years experience in practice before the Interstate Commerce Commission and state regulatory bodies in the South, and in the handling of rail, water and motor transporta-tion matters."

He was instructor of traffic management at the Louisville Institute of Technology for two years, and has served on com-

mittees of the American Petroleum Institute, National Industrial Traffic League, and National Association of Shippers' Advisory Boards. He has also been general chairman of the Ohio Valley Shippers' Advisory Board, and his other activities have included membership on the committee on admissions to practice of the Association of Interstate Commerce Commission Practitioners.

9 Mo. Net Income Was \$358 Million

(Continued from page 715)

1941 had a net railway operating income of \$278,574,923, or 3.73 per cent, compared with \$135,155,886 or 1.82 per cent in the same period in 1940, and \$243,919,060 or 3.21 per cent in 1930. The nine-months gross in the Western district totaled \$1,-449,526,600, an increase of 25.3 per cent compared with the same period in 1940, but a decrease of 5.4 per cent under 1930. Operating expenses totaled \$987,238,591, an increase of 13 per cent above 1940, but a decrease of 13 per cent under 1930.

In the Western district for September the net income was \$23,140,758 compared with \$12,030,963 in September, 1940; net railway operating income amounted to \$43,673,132 compared with \$31,392,803 in September, 1940, and \$50,574,528 in the same month of 1930.

Roosevelt Asks Deferment of Some Waterway Projects

President Roosevelt has reiterated his belief that all non-defense construction projects should be deferred until after the present emergency in a letter which he has sent to Representative Dewey Short, Republican of Missouri, and president of the National Rivers & Harbors Congress, which will hold a meeting in Miami, Fla., on November 13 and 14.

I know that you will agree," wrote the President, "that initiation of new construction projects without defense values should be deferred until the end of the present international emergency." ever, he went on to express his approval of the general purpose for which the convention is being held. "It is fitting," he concluded, "that your association which for so many years has sponsored the systematic prosecution of waterway projects is meeting at this time to consider present and future programs of river and harbor development, of maritime and inland navigation, and of improvement for the control of floods."

"The necessity for reducing non-defense expenditures in the present international situation is indeed acute," Representative Short said in commenting on the President's message, "but we believe there is no type of public works which will contribute more to national safety and a sound national economy than flood control and waterway development, scientifically planned and economically executed by the Army Engineers."

Listed among the speakers at the Miami meeting is Chester C. Thompson, president of the Inland Waterways Corporation, who will speak on the subject, "The Importance of Inland Waterways Transportation in the National Defense."

Fearful lest the American people be led to believe that the President is opposed to the pending rivers and harbors bill, which is expected to be reported next week, Representative Rankin, Democrat of Mississippi, inserted in the Appendix of the October 27 issue of the Congressional Record the complete text of Mr. Roosevelt's letter to Representative Short. "The statement of the President," declared Mr. Rankin, "clearly indicates that he is not only in favor of putting into operation immediately those projects that have national defense value but that he is also in favor of authorizing others as a backlog to absorb the unemployment in case this emergency should come to an end."

Wheeler Offers Sizes and Weights Bill

Senator Wheeler, Democrat of Montana and chairman of the Senate interstate commerce committee, has introduced S. 2015, a bill designed to carry out the Interstate Commerce Commission's recent recommendations to Congress on the matter of the regulation of sizes and weights of motor vehicles engaged in interstate commerce, details of which were given in the Railway Age of August 23, page 310.

Specifically, the bill would amend section 226 of the Interstate Commerce Act to give the commission authority to fix size and weight standards as the need arises under a set-up which provides for "the entertaining and disposition of complaints against a state or political subdivision thereof, attacking its limitations as they apply generally or to a particular location." In the exercise of this power the commission would be authorized to obtain from the highway department of a state or political subdivision thereof, and from the Public Roads Administration of the Federal Works Agency, reports containing technical information concerning highway construction, maintenance, safety, and use, which reports "shall be made part of the record of the investigation to which they pertain, and shall be given appropriate consideration."

Among the considerations which the commission shall give weight to is "the need for such an increase (in sizes, weights, and loads of motor vehicles) in order to carry out the national transportation policy declared in this Act." Enforcement of the commission's regulations would rest with the Federal district courts, but the states would also be permitted to concurrently assist in the enforcement if they so chose.

Last week the Central Motor Transportation Committee urged prompt congressional action on legislation authorizing the commission to remove state restrictions on the size and weight of motor vehicles. The committee, of which Commissioner Rogers is chairman, adopted the following resolution: "It is the judgment of the committee that the passage of legislation regulating sizes and weights of motor vehicles operating in interstate commerce is a matter of primary and se-

rious importance and immediate need in preparation of national defense, and that the Congress of the United States be, and it is hereby, urged to take prompt and favorable action upon legislation to carry out the recommendation of the Interstate Commerce Commission."

Ickes "Oil Shortage" Vanishes

The so-called east coast gasoline shortage vanished into thin air on October 23, when Petroleum Co-ordinator Ickes announced he had reached an agreement with representatives of the British government, as the result of which 25 additional oil tankers are to be returned to normal American service by November 30. Thus it was officially confirmed that current rumors to the effect that the British had more of this country's tankers than they needed and wanted to return some were founded in fact.

At the same time that Mr. Ickes made the announcement of the return of the tankers to the east coast service, he also stated that he had asked Donald Nelson, director of priorities of the Office of Production Management, to lift the restrictions on the sale of gasoline at once. This, Mr. Nelson did the next day. Thus passed into history, at least for the present, the attempt to conserve gasoline in the United States by forcing service stations to close from seven in the evening until seven in the morning, a practice which, it was generally admitted, resulted in the saving of

little, if any, gasoline. Mr. Ickes was generous enough to include the railroads among those agencies which helped to end the alleged shortage. "Intensified use of available transportation; the combined use of pipeline, barge, and rail deliveries of oil; greater efficiencies in the use of tankers remaining in the trade; the conservation of supplies, and similar measures put into effect by the Coordinator's Office steadily cut the deficit," declared Mr. Ickes. Also, he felt that the abnormally warm weather of September and October has cut demand for heating oil far below normal, and has permitted the building up of inventories.

Any measure of praise for the carriers was not to be expected from the oil czar in the light of his testimony before Senator Maloney's investigating committee. There he violently differed with the views of J. J. Pelley, president of the Association of American Railroads, as to just how many idle tank cars there were in the country.

Although Mr. Ickes had previously told the Maloney committee that his program had failed because of the efforts of the committee and the newspapers to ridicule it, yet he was willing to take credit for ending the oil shortage, once it was declared officially over. After citing statistics to show that the inventories on the east coast had increased during the preceding months, he went on to assert that "these figures speak for themselves. They show that our program has been effective, and that the bad outlook for the summer has been overcome. We are now in a much stronger position as the result of our efforts, and the outlook is entirely optimistic."

Mr. Ickes warned the public, however,

that the release of the ships will be provisional. He pointed out that if the British petroleum situation changes materially so as to require renewed tanker aid, the returned ships may have to be reassigned to the shuttle service which brings oil from the Caribbean and Gulf Coast ports to points north of Cape Hatteras where it is reshipped to England and the British Empire in British or foreign-flag vessels.

Representation of Employees

Results of voting in several representation of employees cases have been announced by the National Mediation Board.

In a dispute on the New York Central the Brotherhood of Railroad Trainmen has won the right to represent the yardmen on all the company's lines. As pointed out in the Railway Age of June 7, page 1025, the B. of R. T. represented a large part of the system, but some yardmen in certain yards were represented by the Switchmen's Union of North America. The question arose as to whether the entire New York Central System should be taken as a single unit entitled to designate a representative for purposes of the Railway Labor Act, with the B. of R. T. contending that such was the case. The Board decided in favor of the B. of R. T., as was noted in the abovementioned issue of June 7, and it was predicted that that union would win the election for the entire system. Out of a total of 7,187 employees eligible to vote, the B. of R. T. received 4,112 votes, while the Switchmen's Union of North America got 941 votes, and other organizations 152, with 55 void ballots.

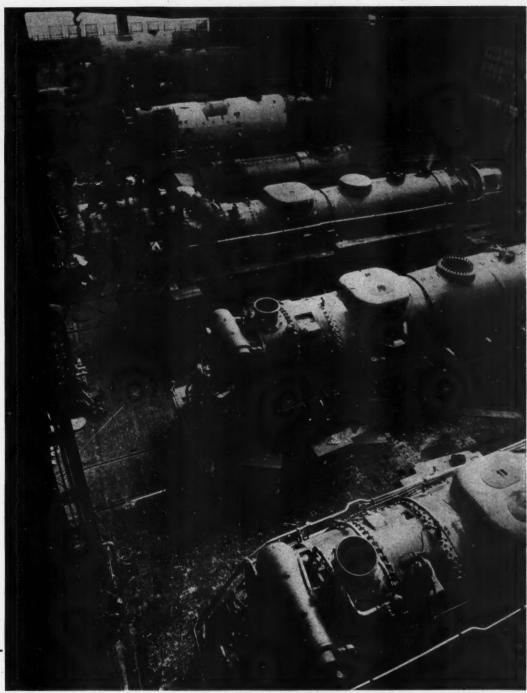
In the case of the Texas Pacific-Missouri Pacific Terminal Railroad of New Orleans the Board has certified that the Brotherhood of Railroad Trainmen has been duly designated to represent the craft or class of yardmasters employed by this company. Out of a total of nine employees eligible to vote, five votes were cast for the B. of R. T., while the Railroad Yardmasters of America received three votes, with one void ballot.

In another case the Board has certified that the Steel Workers' Organizing Committee, C. I. O., has been designated to represent the craft or class of maintenance of way employees of the Arkansas & Memphis Railway Bridge & Terminal Company, that organization having a membership of six out of a total of eight employees eligible to choose a representative.

The Board also announced that as a result of reinvestigation it has certified that the patrolmen on the Pere Marquette have chosen the Railway Patrolmen's Union, A. F. of L., as their representative. The reinvestigation came about after it was found that eight employees' names had been erroneously included in the list eligible for voting. Out of 29 persons eligible to vote, 27 chose the Railway Patrolmen's Union. In another case the Brotherhood of Lo-

In another case the Brotherhood of Locomotive Firemen & Enginemen have won the right to represent the locomotive engineers on the Georgia, Southern & Florida, having received 23 votes to three for the Brotherhood of Locomotive Engineers, with one void ballot, out of a total of 28 eligible to vote.

On the Pacific Electric the Brotherhood of Maintenance of Way Employees has



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beat out the Association of Railway Maintenance of Way Employees by a vote of 438 to 64, with 21 void ballots out of a total of 554 eligible to vote. The former organization had represented the maintenance of way employees with the exception of the track laborers, who were represented by the latter group, and the issue arose as to whether these groups should be polled separately. The Board upheld the Brotherhood of Maintenance of Way Employees in holding that a craft could not be broken up for the purposes of representation under the Railway Labor Act.

How Car Economy Is Working Out

(Continued from page 714)

gram has not yet constituted a problem, it appears likely to "reach considerable volume in the near future, and may necessitate long car hauls, depending upon shipping." However, "close contact is being maintained with those agencies of the government which are directing all of these movements, and there will be no difficulty

in meeting requirements."

The report's comment on the Division's Box Car Section says that to the end of September all requirements for box cars have been successfully met. The handling of the wheat crop is reviewed, the review noting that the movement of "free" wheat for sale in markets was not restricted and that "grain for storage was accepted on showing of space allocations." Reference is made to the increasing importance of the soybean crop "which is beginning to put a considerable burden on the box car supply during September and October"; "here again the question of storage capacity will be the governing factor in the movement this year." The annual restrictions on ventilated cars were in effect in advance of the watermelon season, and there were no instances of shortage of such cars, despite a further slight decrease in ownership. "Some temporary difficulty was experienced during last fall in meeting all demands for 50-ft. device-equipped cars required for the larger model automobiles; otherwise, there were ample cars to take care of all of the commercial shipments offered by the industry."

Special Car Order 42 still requires that all 50-ft, end door and 50-ft, deviceequipped cars be preferentially supplied to protect loadings of government trucks; and "extremely close supervision over that situation has been constantly necessary." the whole, these requirements have been adequately met, although some gondola cars have been used to supplement the supply of end-door 50-ft. cars. As of October 1, there were 31,777 cars equipped or to be equipped with auto-handling devices. Recently devices have been removed from 518 40-ft. cars due to obsolescence, and the cars have been returned to general service. Meanwhile, "the number of cars especially equipped or fitted for particular services is constantly increasing"; and "efforts are being directed toward restricting such special equipment to the lowest practical terms.

Reviewing the work of the Open Car Section, the report says that the supply of hopper cars "has been adequate to meet requirements." There were instances of "tight situations," but arrangements were made to avoid any loss of coal production. Also, there have been "some tight situations of a local and temporary nature covering the supply of covered hopper cars immediately available for loading." The continued increase in the demand for flat cars "has required the closest possible attention to insure adequate supply."

As to port traffic, the situation at all the ports "is excellent and with the continued cooperation of shippers, exporters and steamship lines . . . there is every reason to believe that it will continue to be satisfactory to all concerned." The movement of materials and men in connection with the defense program gave the Military Transportation Section "a busy year." From January through August, a total of 1,857,549 soldiers, sailors, marines and members of the Civilian Conservation Corps were transported by rail, the movements requiring 6,129 routings and 3,732 special trains. These figures do not include the traveling of furloughed men.

The discussion of the passenger-car situation refers to the recent ruling whereby up to 50 per cent of the men in army units may be released on furlough at one time. This is expected to tax the facilities of the railroads during the coming holiday season. The refrigerator car supply "has been ample for all requirements," while attention is being given to tank-car delays—those for which shippers are responsible being referred to Defense Transportation Commissioner Ralph Budd, and those for which the railroads are responsible being taken up with the carriers direct.

Next the report acknowledges the "gratifying" response of shippers to appeals for cooperation in the drive for more efficient car utilization, and goes on to its aforementioned comment on the heavier loading of cars. That subject, it says, "is an ever important one which cannot be overemphasized." It is calculated that if the average 1940 load had remained at the 1939 level it would have required 646,000 more car loads to handle last year's traffic. the basis of the number of loads secured during the peak traffic, this was equivalent to adding 26,000 cars to the equipment supply without capital cost." Meanwhile, attention is also being given to the matter of short routing of empty cars, the prevention of loading with contaminating commodities, and the release of serviceable cars from intra-plant service. Also, constant checks are made to prevent undue detention of cars loaded with company material, or at national defense projects.

A. A. R. Lumber Specifications

At a joint meeting of the Car Construction Committee of the Association of American Railroads and representatives of the lumber manufacturers, the following six suggestions were advanced, not with the thought of making them mandatory or permanent practice, but simply for the duration of the present emergency and to help solve the problem of securing lumber required for new equipment and repairs:

(1) It is suggested that the demand for

edge grain material be confined to sections requiring wearing material, and not be insisted upon for lining and interior roofing,

(2) Require edge grain or heartwood only for the kind of wood and for the part of a car where either is absolutely neces-

(3) Some railroads order select grades for use in repairs instead of common grades as recommended in A. A. R. Specification M-907-33. Under present conditions that procedure is undesirable. The supply situation in the lumber industry possibly would be better served if the common grades were substituted for the select grades in the flooring, lining and inside roofing of repaired cars.

(4) As an emergency proposition only, on new and existing cars where it is possible, lining of double sheathed cars to be ordered in two pieces in varying lengths of six feet and up, and applied to suit nailing post spacing. This does not apply to single sheathed cars. In view of the present emergency this arrangement is brought to the attention of the individual railroads for such action as they see fit.

railroads for such action as they see fit.

(5) The "Use Classification" on pages 4 and 5 of Specification No. M-907-33 provides for several kinds of wood suitable for each detail part. Because so many railroads have limited their acceptable woods it is suggested that, in view of the present emergency, mechanical officers give consideration to other suitable woods

shown in the specification.

(6) Wherever it is practicable inspection to be made by authorized lumber inspectors at point of origin rather than at destination, also for railroads not equipped to make such inspection, that arrangements be made for such inspection by authorized inspectors of other railroads located in the vicinity of the district from which lumber is being shipped. The lumber manufacturers believe this will avoid rejections at destination. This arrangement might be agreeable to some railroads under the present emergency and is a matter for decision of individual railroads.

Assails Big Seaway Tactics

The methods used by the administration in its efforts to put over the billion dollar St. Lawrence waterway project were denounced by Representative Walter C. Ploeser, (R. Mo.) at the twenty-third annual convention of the Mississippi Valley Association held at St. Louis, Mo., on October 27 and 28. The association later passed a resolution condemning the project on the ground that "it is unsound national economy and would seriously handicap the nation's defense effort."

Mr. Ploeser charged that when the President was unable to get a treaty passed by the Senate providing for the project, he tried to induce Congress to approve an "agreement" with Canada. The agreement, he said, has been embraced in a bill requiring only a simple majority approval by both houses instead of the two-thirds majority in the Senate required for the approval of a treaty. He said the President then labled it a national defense project and in an attempt to insure passage, had it made a part of the Rivers and Harbors Bill, an omnibus measure which, as of September 17, included some 250 other

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The Franklin System of Steam Distribution releases the latent power that has heretofore been unobtainable due to the restriction of the piston valve and the conventional valve gear. This results in an increase in the power output. This has been accomplished by a separation of the valve events so that admission and cut-off, release and compression, can be independently controlled along with a corresponding increase in the size of the intake and exhaust port openings. The result is a system of steam distribution that removes the present limitation to locomotive design and insures a marked increase in train load-speed capacity.



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FRANKLIN RAILWAY SUPPLY COMPANY, INC. CHICAGO

In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

projects in all parts of the nation. Mr. Ploeser explained that the purpose was to compel congressmen to pass the entire bill in order to get approval for their own local projects.

Among the activities which would suffer irreparable damage from the St. Lawrence waterway, he said, are railroads, labor, agriculture, highway transport industry in general and the inland waterways.

Chester C. Thompson, president of the Inland Waterways Corporation, and George E. Talmage, Jr., director of the Bureau of Water Carriers of the Interstate Commerce Commission, urged coordination of waterway, railway and motor truck transportation. Mr. Talmage said that there should be effective joint rail-water rates. He also gave an analytical report of regulatory developments under the water carriers section (part III) of the Transportation Act. The Bureau, he said, has received 765 applications for operating authority by water carriers that were engaged in such transportation prior to February 1. Other carriers by water, he continued have elected not to file applications, relying upon their belief that the statutory exemptions in the Act fully cover the operations in which they are engaged.

Truckers Don't Want Govt. RRs

(Continued from page 714)

carriers fear for their future solvency." Among the new activities of A. T. A., he mentioned a Business Development section which directs traffic promotion activities of members. Also organized early this year was a Traffic Service department "to establish closer relations between the industry and government traffic officials." This unit, Mr. Rodgers asserted, "has done an outstanding job keeping interested carriers informed of government traffic movements and of the letting of government contracts to industrial firms which might be induced to use truck service. It also has rendered the government a valuable service by acting in an advisory capacity in connection with motor carrier facilities, rates, tariffs, routes and other matters."

Of the new national board to investigate transportation, the report said: "The board undoubtedly will hear and consider theories about truck subsidy; suggestions that truck runs should be limited to 25 miles, 100 miles or 250 miles. It goes without saying that A. T. A. intends to be ready to give the board a clear picture of our side of the story. Our success will depend in large measure upon the co-operation we get from the industry. And I want to emphasize that it is important we get that cooperation."

T. H. MacDonald, commissioner, Public Roads Administration, Federal Works Agency, warned the truckers that neither men nor materials may be adequate in the future for proper maintenance of highways. Because of this condition he urged "that trucking men in the nation employ the utmost care not to send vehicles over roads which are built to carry less weight than these carriers will aggregate. A few overloaded vehicles can do more damage to a highway than hundreds of units which are

conveying the amounts designated for the route to support." The commissioner also doubted whether the trucking industry was sufficiently cohesive to meet the demands of the emergency. "I do not mean to suggest that the trucking industry should be organized into a relatively few big concerns," he said. "I am only emphasizing that lack of organization is a handicap in co-ordinating the industry for greatest service in the event of a transportation shortage. And that is the main reason we are now conducting the national defense trucks and bus inventory. It is also the main reason why truck owners should respond to the inventory."

B. & M. Denied "Grandfather" Rights on Truck Routes

Following generally the recommenda-tions of Examiner Paul R. Naefe's proposed report of more than three years ago, the Interstate Commerce Commission, Division 5, has found that trucking operations contracted for by the Boston & Maine and the Boston & Maine Transportation Company do not suffice to establish rights for those companies under the Motor Carrier Act's "grandfather" clause. railroad and its affiliate which had been offering highway freight service for some 10 years before the grandfather clause dates-June 1, 1935, for common carriers and July 1, 1935, for contract carrierswill be precluded from continuing such services unless it files a "new-operation" application and makes a showing of public convenience and necessity on the basis of the present set-up of truck transportation on the routes involved.

The majority report represents the views of Commissioners Lee and Rogers, Chairman Eastman, dissenting in part, was unable to agree with the conclusions as to the B. & M. and B. & M. T. Such conclusions, he said, "will produce results inconsistent with the practical actualities of the situation, and with fair dealing, and are based on legal reasoning which, in my judgment, has not been sufficiently tempered by a consideration of the ends which justice plainly requires." Too close a pursuit of theory "has its dangers, even in science, and certainly in law," the chairman next observed as he went on to recall how the B. & M., one of the first railroads to venture into the trucking business, "had an idea that it could get better results by turning operation over to contractors who had had extensive practical experience in the trucking business." That B. & M. T. was nevertheless regarded by the general public "as a carrier engaged in motor vehicle operations on its own account," Mr. Eastman thinks there can be "no doubt"; and he asserted that the I. C. C. so regarded it "at the time of our investigation of motor transporta-

Like the examiner, whose proposed report was reviewed in the Railway Age of May 28, 1938, page 921, the majority pointed out that on the grandfather dates neither the B. & M. nor the B. M. & T. owned any highway freight equipment; and went on to find that the haulage performed for them by independent vehicle owners under contract could not be regarded as motor carrier operations of the

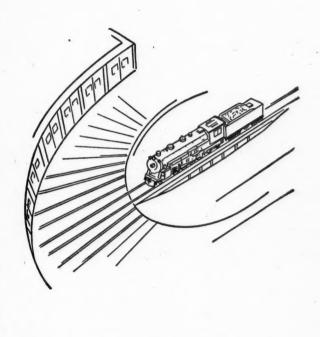
railroad and its subsidiary. The B. & M. and B. & M. T. applications covered several routes between points in Massachusetts, New Hampshire, Vermont, and Maine. The report also disposes of applications covering the same routes which were filed by Big Three, Inc., the largest of the B. & M. contract truckers; and that applicant is given grandfather rights for its operations on such routes which have remained continuous since the grandfather date. Meanwhile, the commission dismissed B. & M. and B. & M. T. applications covering terminal transfer and pick-up and delivery operations, pointing out that such operations are not subject to the Motor Carrier Act.

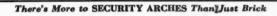
The majority report first discussed the Transportation Company applications. which sought either common-carrier certificates or contract-carrier permits or both -whatever might be necessary to continue freight services which grossed \$967,000 in 1936. The operations involved were held to be common carriage, and the report pointed out that prior to January 1. 1936 (six months after the common-carrier grandfather date) the B. & M. T. did not own or operate any motor vehicles-"all of its traffic was transported in vehicles owned and operated by seven motor carriers under contracts or agreements which were oral, except in one instance." All of those motor carriers have filed grandfather applications, some of which have been granted as is Big Three's in the

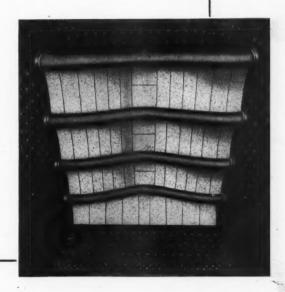
As indicated above, B. & M. T. on January 1, 1936, discontinued using the vehicles of Big Three on certain routes and in place thereof instituted physical operations with vehicles leased from the B. & M., the latter having acquired the trucks by purchase from Big Three. Thereafter the use of Big Three vehicles was discontinued on other routes and as of May 12. 1937, the date of the hearing, Big Three's vehicles were used only on five routes. The services provided by the other contract truckers have remained substantially the same. B. & M. T. contended that, regardless of the fact that it did not own the trucks which carried its traffic, it was nevertheless in bona fide operation as a common carrier by motor vehicles on the grandfather date. Also, it contended that it was a common carrier at common law, but the commission came back with a citation of its decision in the Acme Fast Freight, Inc., case, which "recognized a distinction between a common carrier under the common law and a 'common carrier by motor vehicle' as defined in the act.'

Next the report cited the Dixie Ohio Express Company case and decisions following the rule laid down therein, i. e., that the "controlling question" where an applicant claimed common-carrier status and did not own its own vehicles "is not whether the vehicles were leased, but rather whether the vehicles of the other carriers were operated under applicant's direction and control and under its responsibility to the general public as well as the shipper." The B. & M. T. arrangements with its contract truckers, the report held, did not meet that test. The B. & M. applications, seeking authority similar to that sought by B & M. T., were disposed of in like fashion. In disposing of the Big

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Three applications, the commission refused to grant grandfather rights on routes where service was discontinued by that applicant after the B. & M. T. changed over from

contract to direct operations.

The situation, which may result from the latter was one of the things that bothered Chairman Eastman. "So far as many of these operations are concerned," he said, "no certificate is granted to anybody, because of the finding that the rights of Big Three, Inc., with respect to these operations lapsed by reason of discontinuance of service not long after it ceased to conduct them as a contractor for the Boston & Main Transportation Company, and the latter assumed direct charge. Under these findings, therefore, it follows that motor vehicle operations which have been furnishing service to the public continuously and without interruption for many years must now cease, because, forsooth, no one has authority under Part II of the Interstate Commerce Act to carry them I am unable to accept conclusions which produce such strange and anomalous results, plainly contrary to the public interest.

In view of the Acme decision, Mr. Eastman suggests, it might possibly be thought that B. & M. T. was a forwarder with respect to its arrangements with the contract truckers other than Big Three and N. F. Smith & Company. The latter operated under an oral arrangement similar in terms to the written contract with Big Three. As Mr. Eastman reads the Dixie Ohio decision, the Transportation Company should be qualified as fully responsible under its set-up with Big Three and Smith.

Meetings and Conventions

The following list gives names of secretaries, stes of next or regular meetings and places of

The following list gives names of secretaries, dates of next or regular meetings and places of meetings:

ALIED RAILWAY SUPPLY ASSOCIATION.—J. F. Gettrust, P. O. Box 5522, Chicago, Ill.

AMERICAN ASSOCIATION OF FREIGHT TRAFFIC OFFICERS.—W. R. Curtis, F. T. R. M. & O. R. R., 327 S. La Salle St., Chicago, Ill.

AMERICAN ASSOCIATION OF GENERAL BAGGAGE AGENTS.—E. P. Soebbing, 1431 Railway Exchange Bldg., St. Louis, Mo. Annual meeting, October 6-8, 1942, Omaha, Neb.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C. R. R. of N. J., 143 Liberty St., New York, N. Y. Annual meeting, November 11-13, 1941, Del Monte Hotel, Del Monte, Cal.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—F. O. Whiteman, Room 332, Dearborn Station, Chicago, Ill. Annual meeting, May 12-14, 1942, Hotel Stevens, Chicago, Ill.

AMERICAN ASSOCIATION OF RAILWAY ADVERTISING AGENTS.—E. A. Abbott, Poole Bros., Inc., 85 W. Harrison St., Chicago, Ill. Annual meeting, January 16-17, 1942, St. Louis, Mo.

AMERICAN ASSOCIATION OF SUPERINTENDENTS OF DINING CARS.—F. R. BOFFER, C. I. & L.

nual meeting, January 16-17, 1942, St. Louis, Mo.

American Association of Superintendents of Dining Cars.—F. R. Borger, C. I. & L. Ry., 836 S. Federal St., Chicago, Ill.

American Railway Bridge and Building Association.—A. G. Shaver, 310 S. Michigan Ave., Chicago, Ill. 1942 meeting, Chicago, Ill.

American Railway Car Institute.—W. C. Tabbert, 19 Rector St., New York.

American Railway Development Association.—G. E. Smith, New York Central R. R., La Salle Street Station, Chicago, Ill.

American Railway Engineering Association.—Works in cooperation with the Association of American Railway Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill. Annual meeting, March 17-19, 1942, Palmer House, Chicago, Ill. American Railway Magazine Editors's Association.—W. M. Jones, Baltimore & Ohio R. R., 1105 B. & O. R. R. Bldg., Baltimore, Md. Annual meeting, November 14-15, 1941, Hotel Montelcone, New Orleans, La.

American Short Link Railroad Association.—J. H. Huntt, Tower Bldg., Washington, D. C. American Society of Mechanical Engineers.—C. E. Davies, 29 W. 39th St., New York,

N. Y. Annual meeting, December 1-5, 1941, Hotel Astor, New York, N. Y. Railroad Division, C. L. Combes, Railway Age, 30 Church St., New York, N. Y. Railroad sessions, December 4, 1941, Hotel Astor, New York, N. Y.

AMERICAN TRANSIT ASSOCIATION.—Guy C. Hecker, 292 Madison Ave., New York, N. Y.

AMERICAN WOOD PRESERVERS' ASSOCIATION.—H. L. Dawson, 1427 Eye St. N. W., Washington, D. C. Annual meeting January 27-29, 1942, Nicollet Hotel, Minneapolis, Minn.

ASSOCIATION OF AMERICAN RAILROADS.—H. J. Forster, Transportation Bldg., Washington, D. C.

Operations and Maintenance December 1-5, 1941

orster, Transportation Bldg., Washington, C.
Operations and Maintenance Department.
—Charles H. Buford, Vice-President, Transportation Bldg., Washington, D. C.
Operating-Transportation Division. — L.
R. Knott, 59 E. Van Buren St., Chicago, Ill.
Operating Section.—J. C. Caviston, 30
Vesey St., New York, N. Y.
Transportation Section.—L. R. Knott, 59 E. Van Buren St., Chicago, Ill.
Fire Protection and Insurance Section.
—W. F. Steffens, New York Central, Room 3317, 230 Park Avenue, New York, N. Y.
Freight Station Section.—L. R. Knott, 59 E. Van Buren St., Chicago, Ill.
Medical and Surgical Section.—J. C.
Caviston, 30 Vesey St., New York, N. Y.
Protective Section.—J. C. Caviston, 30

Medical and Surgical Section.—J. C.
Caviston, 30 Vesey St., New York,
N. Y.
Protective Section.—J. C. Caviston, 30
Vesey St., New York, N. Y.
Safety Section.—J. C. Caviston, 30
Vesey St., New York, N. Y.
Safety Section.—J. C. Caviston, 30
Vesey St., New York, N. Y.
Telegraph and Telephone Section.—
W. A. Fairbanks, 30 Vesey St.,
New York, N. Y.
Engineering Division.—W. S. Lacher, 59
E. Van Buren St., Chicago, Ill. Annual meeting, March 17-19, 1942, Palmer House, Chicago, Ill.
Construction and Maintenance Section.
—W. S. Lacher, 59 E. Van Buren
St., Chicago, Ill. Annual meeting,
March 17-19, 1942, Palmer House,
Chicago, Ill.
Electrical Section.—W. S. Lacher, 59
E. Van Buren St., Chicago, Ill.
Signal Section.—R. H. C. Balliet, 30
Vesey St., New York, N. Y.
Mechanical Division.—Arthur C. Browning, 59 E. Van Buren St., Chicago, Ill.
Electrical Section.—J. A. Andreucetti, 59 E. Van Buren St., Chicago, Ill.
Flectrical Section.—J. A. Andreucetti, 59 E. Van Buren St., Chicago, Ill.
Farrell, Transportation Bldg., Washington, D. C.
Freight Claim Division.—Lewis Pilcher, 59 E. Van Buren St., Chicago, Ill.
Annual meeting, 1942, Chicago, Ill.
Motor Transport Division.—George M.
Campbell, Transportation Bldg., Washington, D. C.
Car-Service Division.—E. W. Coughlin, Transportation Bldg., Washington, D. C.
Accounting Division.— E. R. Ford, Transportation Bldg., Washington, D. C.
Accounting Division.— E. R. Ford, Transportation Bldg., Washington, D. C.

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Accounting Division. — E. R. Ford,
Transportation Bldg., Washington,
D. C.

Treasury Division.—E. R. Ford, Transportation Bldg., Washington, D. C. Traffic Department.—A. F. Cleyeland, Vice-President, Transportation Bldg., Washington, D. C.

Association of Railway Claim Agents.—F. L. Johnson, Claim Agent, Alton R. R., 340 W. Harrison St., Chicago, Ill. Annual meeting, June 17-19, 1942, Hotel Statler, Buffalo, N. Y.

Bridge and Building Supply Men's Associa-tion.—R. Y. Barham, Armco Railroad Sales Company, 310 S. Michigan Ave., Chicago, III.

Company, 310 S. Michigan Ave., Chicago, Ill.

Canadian Railway Club.—C. R. Crook, 4415
Marcil Ave., N. D. G., Montreal, Que. Regular meetings, second Monday of each month except June, July and August, Windsor Hotel, Montreal, Que.

Car Department Association of St. Louis, Mo.—J. J. Sheehan, 1101 Missouri Pacific Bldg., St. Louis, Mo. Regular meetings, third Tuesday of each month, except June, July and August, Hotel De Soto, St. Louis, Mo. Car Department Officers' Association.—Frank Kartheiser, Chief Clerk, Mechanical Dept., C. B. & Q., Chicago, Ill.

Car Foremen's Association of Chicago.—G. K. Oliver, 8238 S. Campbell Ave., Chicago, Ill. Regular meetings, second Monday of each month, except June, July and August, La Salle Hotel, Chicago, Ill.

Central Railway Club of Buffalo.—Mrs. M. D. Reed, 1840-42 Hotel Statler, McKinley Square, Buffalo, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

Eastern Association of Car Service Officers.

L. T. Bougher, 424 W. 2022 School and Control of the Statler of Statler, Buffalo, N. Y.

Eastern Association of Car Service Officers.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.

-J. T. Bougher, 424 W. 33rd St. (11th floor), New York, N. Y.

Vol. 111. No. 18

Locomotive Maintenance Officers' Association.—C. M. Lipscomb, 1721 Parker Street, No. Little Rock, Ark.

Master Boiler Makers' Association.—A. F. Stiglmeier, 29 Parkwood St., Albany, N. Y. National Association of Railroad and Utilities Commissioners.—Ben Smart, 7413 New Post Office Bidg., Washington, D. C. 1942 meeting, Dallas, Tex.

National Railway Appliances Association.—C. H. White, Room 1826, 208 S. La Salle St., Chicago, Ill. Exhibit in connection with A. R. E. A. Convention, March 16-19, 1942, International Amphitheatre, Chicago, Ill. New England Railroad Club.—W. E. Cade, Jr., 683 Atlantic Ave., Boston, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Touraine, Boston, Mass.

New York Railroad Club.—D. W. Pye, 30 Church St., New York, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September, and December, 29 W. 39th St., New York, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September, and December, 29 W. 39th St., New York, N. Y. Pacific Railway Club.—William S. Wollner, P. O. Box A, Sausalito, Cal. Regular meetings, second Thursday of each alternate month, at Palace Hotel, San Francisco, and second Friday of each alternate month, at Hotel Hayward, Los Angeles.

Railway Business Association.—P. H. Middleton, First National Bank Bldg., Chicago, Ill. Annual meeting, November 13, 1941, Hotel Stevens, Chicago, Ill. Annual meeting, November 13, 1941, Hotel Stevens, Chicago, Ill. Annual meeting, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

Railway Electric Supply Manufacturers' Association.—J. McC. Price, Allen-Bradley Company, 600 W. Jackson Blvd., Chicago, Ill. Railway Fuel and Traveling English, Pittsburgh, Pa.

Railway Tieleraph and Telephone Appliance Association.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York, N. Y. Meets with Telegraph and Telephone Section of A. A. R.

Railway Telegraph and Telephone Association.—G. A. Nelson, Waterbury Ba

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.

—D. W. Brantley, C. of Ga. Ry., Savadnah,
Ga.

TORONTO RAILWAY CLUB.—D. M. George, P. O.
BOX 8, Terminal "A," Toronto, Ont. Regular meetings, fourth Monday of each month,
except June, July and August, Royal York
Hotel, Toronto, Ont.

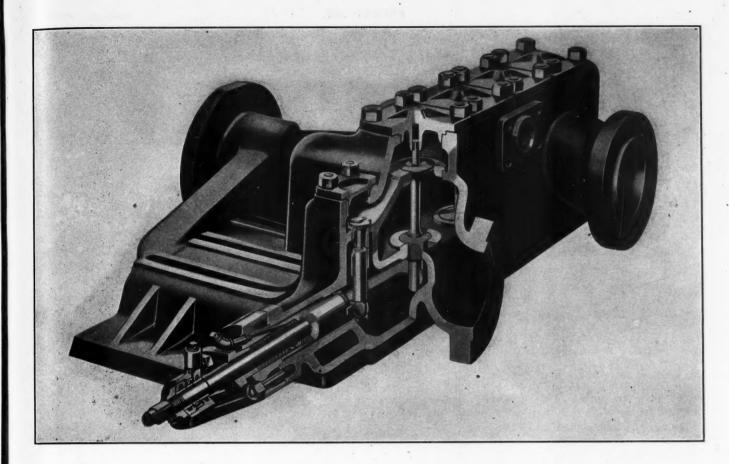
TRACK SUPPLY ASSOCIATION.—Lewis Thomas, Q.
and C. Company, 59 E. Van Buren St., Chicago, Ill.

UNITED ASSOCIATIONS OF RAILROAD VETERANS.—
Roy E. Collins, 112 Hatfield Place, Pot
Richmond, Staten Island, N. Y.
WESTERN RAILWAY CLUB.—E. E. Thulin (Executive Secretary) Room 822, 310 S. Michigan
Ave., Chicago, Ill. Regular meetings, third
Monday of each month, except January, June,
July, August and September, Hotel Sherman,
Chicago, Ill.

Would Approve Merger of Water Carriers

The Great Lakes Transit Corporation will be permitted to acquire control of the Minnesota-Atlantic Transit Company through stock ownership, if Division 4 of the Interstate Commerce Commission adopts a recommended report of its Examiner Ralph R. Molster.

The Great Lakes company operates two distinct branches of service, the Lake Superior division, between Buffalo, N. Y., and Duluth, Minn., via Detroit, Mich., and other way ports, 986 miles; and the Lake Michigan division, between Buffalo and Chicago, Ill., via various way ports, including Milwaukee, Wis., 893 miles. Minnesota company operates between Buffalo, N. Y., and Duluth, Minn., via Detroit, Mich.



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The American multiple-valve throttle is located between the superheater units and the cylinders. This position affords protection to the superheater units as they always contain steam . . . regardless of whether the throttle is open or closed.

When superheater units are filled with steam, unit wall temperatures are within safe limits.

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THE SUPERHEATER COMPANY

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Construction

Canadian National. — A contract amounting to approximately \$175,000 has been awarded Bert Schuh, Edmonton, Alta., for the construction of a 300-ton coaling station with an attached sand pocket at Wainright, Alta. The coaling station will be constructed of timber treated with zinc chloride and will be supported on concrete foundations resting on piling. The coal pocket will be divided into two bins for the storage of different grades of coal, each bin serving two tracks. The coal will be elevated from a hopper at the ground level to the coal pocket by an endless chain bucket elevator operated by a 15-hp. electric motor. The sand drying equipment will be located in a separate two-story building.

A 200-ton coaling station of a similar type with attached sand pocket is being constructed at Kindersley by company forces. The foundation work for a similar coaling station of 300-tons' capacity at Winnipeg, Man., will be completed by company forces this fall, and bids will be asked in the spring for the balance of the work.

LEHIGH VALLEY. - The Pennsylvania Public Utility Commission has approved plans calling for the construction of a highway crossing above grade where state highway route No. 13002, as it is proposed to re-locate it, will cross over and above the single track of the Mahoning Creek branch of the Lehigh Valley, and cross over the adjacent channel of Mahoning Creek in the borough of Lehighton, Pa. The plans call for the construction of a new three-span continuous deck I-beam bridge with reinforced concrete floor, having a total length of 156 ft., and supported upon reinforced concrete piers and abutments. Total cost of the improvement is estimated at \$120,000, of which cost of the substructure and superstructure of the new bridge amounts to \$74,300.

Union Pacific.—A contract amounting to approximately \$60,000 has been awarded the James Leck Company, Minneapolis, Minn., for excavation and the construction of concrete foundations and floors for the new shop buildings to be constructed at Cheyenne, Wyo., which were reported in the *Railway Age* of August 9, page 251.

Union Pacific.—A contract amounting to about \$49,000 has been awarded Mac Isaac & Menke, Inc., Los Angeles, Cal., for the construction of commissary buildings to be erected in the coach yard in East Los Angeles. One of the commissary buildings will be 40 ft. by 113 ft.. two stories high, with the first floor construction of concrete and the second floor of frame construction with a stucco exterior. This building will contain offices, cold rooms and refrigerating machinery. It will be connected to the other building, which will be used for storage purposes, by a loading and unloading platform. The storage building will be one story, 24 ft. by 70 ft. An asphalt driveway and trackage will also be installed.

Equipment and Supplies

LOCOMOTIVES

THE MISSISSIPPI EXPORT has ordered one 44-ton Diesel-electric switching locomotive from the General Electric Company.

THE DELAWARE & HUDSON is in the market for from 10 to 15 steam locomotives of the 4-8-4 type.

THE UPPER MERION & PLYMOUTH has ordered one 660-hp. Diesel-electric switching locomotive from the Baldwin Locomotive Works.

THE NEW ORLEANS PUBLIC BELT has placed an order for three Diesel-electric switching locomotives of 660-hp. each with the Baldwin Locomotive Works.

The Pere Marquette has ordered four 1,000 hp. and one 600 hp. Diesel-electric switching locomotives from the Electro-Motive Corporation.

THE AMERICAN STEEL & WIRE Co. has ordered one 45-ton Diesel-electric locomotive of 300-hp. from the Whitcomb Locomotive Company.

THE RICHMOND, FREDERICKSBURG & POTOMAC has on order two 660-hp. Diesel-electric switching locomotives with the American Locomotive Company for January, 1942 delivery.

THE BALTIMORE & OHIO CHICAGO TERM-INAL has ordered ten Diesel-electric switching locomotives comprising six of 600-hp. and four of 1,000-hp. from the Electro-Motive Corporation.

THE CHESAPEAKE & OHIO has ordered 10, 2-6-6-6, Mallet type locomotives from the Lima Locomotive Works. These are in addition to ten locomotives of the same type ordered from the Lima Locomotive Works in September of last year.

FREIGHT CARS

THE PITTSBURGH & WEST VIRGINIA is inquiring for 100 40-ft. 6-in. box cars of 50 tons' capacity.

THE MESTA MACHINE COMPANY is inquiring for six gondola cars of 70 tons' capacify.

THE NATIONAL RAILWAYS OF MEXICO is reported to be in the market for 200 tank cars of 50 tons' capacity.

THE WABASH CAR & EQUIPMENT Co. has placed an order for 25 covered hopper cars of 70 tons' capacity with the American Car & Foundry Co.

THE UNITED STATES WAR DEPARTMENT is reported to be inquiring for from 25 to 75 flat cars of 20 tons' capacity and for

from 25 to 75 gondola cars of 20 tons' capacity.

THE LEHIGH VALLEY, reported in the Railway Age of September 27 is planning the purchase of 1,000 50-ton coal cars, is now reported to be in the market for this equipment.

SIGNALING

THE ILLINOIS CENTRAL has placed orders with the Union Switch & Signal Company for nine Model 31 electro-pneumatic car retarders (700 rail ft.) for installation in the northbound Markham classification yard. These retarders are being installed by the regular field construction forces of the Illinois Central in replacement of older type retarders in this yard.

Supply Trade

C. D. Hicks has been appointed district sales manager of the Union Railway Equipment Company, Chicago, with offices at 4 North Eighth street, St. Louis, Mo.

The American Swedo Iron Corporation, 230 Park Ave., New York has been organized and operations begun at its plant in Danville, Pa., for the manufacture of muckbar, staybolt iron and low-phosphorous melting bar. Harold T. Henry has been elected president and Eugene Brandies vice-president of the new company.

The Carnegie-Illinois Steel Corporation, subsidiary of the United States Steel Corporation, will begin work immediately on a \$15,000,000 expansion program to provide increased steel and iron making capacity at its Gary, Ind., steel works. Construction will include a new open hearth furnace, the re-building and enlargement of a blast furnace, installation of greater soaking pit capacity, the rebuilding of a battery of coke ovens, and provision for additional ore unloading facilities.

The Fairbanks, Morse & Co. reports that a letter of intent has been issued by the Secretary of the Navy authorizing the expenditure of \$5,500,000 for a new building and additional equipment and machinery at the company's Beloit, Wis. works. The purpose of the new plant is to triple production of Fairbanks-Morse Diesel engines for the United States Navy. The new structure, which will be of concrete, brick and steel construction, will have a length of about 660 ft. and a depth of 460 ft., with a total floor space of more than 3,000 sq. ft. The project will mean the addition, in the near future, of at least 1,200 to 1,500 more factory employees to the company's present payroll, which now totals 4,500 men at the Beloit plant.

The General Electric Company has elected five new vice-presidents in connection with a major change in the company's organization. Under the new setup, the company will have four major operating departments: Appliance and Merchandise;



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By virtue of its wear-resisting qualities HUNT-SPILLER Air Furnace GUN IRON assures maximum service life from all components, releases machines and manpower for other important jobs, contributes to maximum availability of power and, of course, helps to swell the increase of materials for other needs.

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HUNT SPILLER GUN IRON Radio and Television; Lamp; and Apparatus department which, because of its great volume of business and diversification of products, will be staffed by five vicepresidents, whose duties will be along functional lines. Walter R. G. Baker, manager of the radio and television department since 1939, has been elected a vicepresident. The other new vice-presidents appointed will staff the apparatus department as follows: Chester H. Lang, in charge of defense activities and also continuing as manager of apparatus sales; David C. Prince, in charge of application engineering; Elmer D. Spicer, in charge of manufacturing; and Harry A. Winne, in charge of design engineering.

The Air Reduction Company, Inc., has made available to its stockholders a new booklet entitled "Air Reduction-A Quarter Century of Progress," which, illustrated both with pictures and diagrams, completely describes the methods, the markets and the nature of the business of its five operating companies. The Air Reduc-tion Company today has about two and one-half times as many stockholders as it has employees, although these latter number over 6,100 and the company desired to explain the many important aspects of its business to them, and how its products are playing a vital part in numerous industries now in the forefront of national defense, such as shipbuilding, aviation, explosives, manufactured gas, sheet metal products and steel works and rolling mills. The company separates air into component gases and supplies these separate gases for industrial, commercial and medicinal use. It is a major producer of oxygen, nitrogen, hydrogen, acetylene, calcium carbide, carbon dioxide, helium, neon, arc welding machines and equipment.

OBITUARY

Henry F. Gilg, who was in the railway supply business in Pittsburgh, Pa., for a great many years, died October 10. He was 82 years of age.

William Beye, vice president, United States Steel Corporation of Delaware, died October 27 in Pittsburgh, Pa. Mr. Beye graduated from the University of Wisconsin in 1902 and Lake Forest in 1904. He was admitted to the Illinois bar in April 1904 and from 1904 to 1937 practiced in Chicago as a member of the firm of Knapp, Beye, Allen & Cushing, advisory counsel for the subsidiaries of United States Steel Corporation. He was elected Vice President of United States Steel Corporation in charge of Industrial Relations in 1937. Upon the organization of United States Steel Corporation of Delaware in 1938 he became Vice President and General Counsel. Mr. Beye is credited with the authorship of the Illinois Workman's Compensation Act.

William M. Beard, a director and former vice-president, secretary and treasurer of the Union Carbide & Carbon Corp., died at his home in Glen Ridge, N. J., October 28. He was 65 years of age.

Financial

ATLANTIC COAST LINE.—Abandonment.
—This company has asked the Interstate
Commerce Commission for authority to
abandon a line extending from Bloomfield,
Fla., to Yalaha, one mile.

Boston & Maine.—Abandonment.—This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon that portion of its Conway branch extending from Jewett Station, N. H., to Somersworth Station, 5.5 miles.

CHESAPEAKE & OHIO.—Sale of Erie Holdings.—This road sold on October 21 some 750,000 shares of old Erie common and preferred stocks to Hemphill Noyes & Co., and Merrill Lynch, Pierce, Fenner & Beane. This sale reduces C. & O. holdings in the road to about four per cent of total new common stock to be issued in exchange for old securities. See item under Erie in this column.

CHICAGO, MILWAUKEE, ST. PAUL & PA-CIFIC-ILLINOIS CENTRAL.—Abandonment.— These companies and the Dubuque & Sioux City, a subsidiary of the Illinois Central, have asked the Interstate Commerce Commission for authority to abandon connecting tracks between their lines at Delaware, Iowa, 0.2 mile.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—Equipment Trust Certificates.—
This company has been authorized by Division 4 of the Interstate Commerce Commission to assume liability for \$2,744,000 of 13% per cent equipment trust certificates, maturing in 14 equal semi-annual installments of \$196,000 on May 1 and November 1, beginning May 1, 1942, and ending November 1, 1948. The issue has been sold at 100.173 to a group comprised of Harris, Hall & Co., Drexel & Co., Alex. Brown & Sons, and the Illinois Company of Chicago, making the average annual cost to the company approximately 1.33 per cent.

CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA.—Equipment Trust Certificates.—This company has asked the Interstate Commerce Commission for authority to assume liability for \$1,210,000 of equipment trust certificates, maturing in 10 equal annual installments of \$121,000 on December 1 in each of the years from 1942 to 1951, inclusive. The proceeds will be used as part of the purchase price of new equipment costing a total of \$1,621,000 and consisting of 500 40 ft. 6 in. box cars.

DULUTH, SOUTH SHORE & ATLANTIC.—
Trustees' Certificate.—This company has been authorized by Division 4 of the Interstate Commerce Commission to issue a trustees' certificate in the amount of \$250,000, to be sold or otherwise disposed of at par and accrued interest and the proceeds used in connection with the redemption of \$347,000 of first mortgage five per cent gold bonds of the South Shore Dock Company.

ERIE.—Reorganization and Acquisition of Properties.—In the furtherance of a

plan of reorganization for this company under section 77 of the Bankruptcy Act, Division 4 of the Interstate Commerce Commission has authorized it to purchase the properties of two of its subsidiaries. the Nypano and the Cleveland & Mahoning Valley. At the same time the Erie was authorized to issue \$18,000,000 of Ohio division first mortgage 31/4 per cent bonds, due September 1, 1971, to be sold and the proceeds used to redeem (a) \$8,-600,000 of New York, Pennsylvania & Ohio extended 4¼ per cent, prior-lien bonds, due March 1, 1950, (b) \$2,816,000 of Cleveland & Mahoning Valley first mortgage four per cent bonds, due July 1, 1962, (c) \$6,700,000 of Erie-Cleveland & Mahoning Valley collateral trust, 1939, four per cent certificates, and (d) \$541,000 of Rayen Terminals first mortgage serial four per cent bonds. The acquisition and issuance of securities is authorized subject to the express condition that the terms and provisions of the indenture pursuant to which the bonds are issued may not be modified in respect to the sinking fund, unless such modification is first approved by the commission. At the same time the Erie has asked the commission for authority to further consolidate its properties by purchasing the following subsidiaries: Buffalo, Bradford & Pittsburgh; Columbus & Erie; Erie & Wyoming Valley; Jefferson; Mossic Mountain & Carbondale; New York, Lake Erie & Western Coal & Railroad; Tioga; and the West Clarion. The subsidiaries have also joined in the application.

In another order announced at the same time, Division 4 has permitted the Nypano to acquire a line known as the Westerman Coal & Iron, and extending from Sharon, Pa., to a point 0.5 mile west of the Pennsylvania-Ohio State line, 2.1 miles. The road to be acquired is owned by the Erie Land & Improvement Company of Pennsylvania, also a subsidiary of the Erie.

FLORIDA EAST COAST.—Equipment Trust Certificates and R. F. C. Financing.—Division 4 of the Interstate Commerce Commission has approved a plan whereby this company will issue and sell to the Reconstruction Finance Corporation \$1,000,000 of 234 per cent equipment trust certificates, maturing in 20 equal semiannual installments of \$50,000 on May 1 and November 1, beginning May 1, 1942, and ending November 1, 1951.

LOUISVILLE & NASHVILLE. — Abandonment.—This company would be permitted to abandon a line extending from Sheffield, Ala., southerly to the end of the line at Tuscombia, 2.3 miles, if Division 4 of the Interstate Commerce Commission adopts a recommended report of its Examiner Lucian Jordan.

MINNEAPOLIS, NORTHFIELD & SOUTHERN.—Stock.—This company has asked authority from the Interstate Commerce Commission to issue 10,632 shares of common capital stock with a par value of \$100. The stock is to be divided pro rata among the road's stockholders.

The application states that the capital structure of the road is "obsolete" and goes on to declare that it "is not balanced in

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that outstanding stock and bonds aggregate only \$879,400 whereas the unappropriated corporate surplus aggregates \$1,-382,996, and it would be very desirable to more nearly equalize the amount of stock outstanding with investment in property held for and used in transportation serv-Before the new stock is issued, the company will have the articles of incorporation amended to authorize the issuance of 15,000 instead of 10,000 shares of common stock as is now provided.

MISSOURI PACIFIC.—Abandonment.—The Mississippi River & Bonne Terre and the Missouri-Illinois, respectively, have asked the Interstate Commerce Commission for authority to abandon a line and the operation thereof extending from Derby, Mo., to Turpin, 10.7 miles.

MISSOURI PACIFIC. - Reorganization. -Division 4 of the Interstate Commerce Commission has issued an order submitting its plan of reorganization for this company to those entitled to vote upon it for their acceptance or rejection. Copies of the plan, the ballots and the other requisite material will be mailed to stockholders and creditors entitled to vote, on or about November 19, 1941, according to I. C. C. Secretary Bartel. Ballots must be mailed to the commission not later than February 17, 1942, to be valid.

MISSOURI PACIFIC. - Equipment Trust Certificates.—This company has been authorized by Division 4 of the Interstate Commerce Commission to assume liability for \$4,185,000 of 21/4 per cent equipment trust certificates, maturing in 15 equal annual installments of \$279,000 on November 1 in each of the years from 1942 to 1956, inclusive. The issue has been sold at 101.666 to Gregory & Son, Inc., making the average annual cost to the company approximately 2.03 per cent.

NORFOLK SOUTHERN .- R. F. C. Loan .-This recently-reorganized company has asked the Interstate Commerce Commission to approve a loan to it from the Reconstruction Finance Corporation in the amount of \$368,000. The loan, which would run for a period of 10 years and would bear interest at four per cent, would be used to carry out a plan of reorganization approved by the federal district court on May 14, 1941. The funds would be specifically used to reimburse the company's treasury for money expended by the receivers from earnings in order to effectuate the improvement program suggested by the R. F. C. in its report of May,

PENNROAD.—Purchase of Own Stock.— The Securities and Exchange Commission has issued an order permitting this company to buy not more than \$125,000 shares of its own common stock between now and March 1, 1942, with the provisions that the shares not be bought from any affiliated persons of the corporation or "any affilpersons of the corporation or "any affil-lated persons of such persons," and that the shares be bought only on a securities exchange. The order, which was issued under the provisions of the Investment Company Act of 1940, notes that Pennroad had registered as a closed-end management investment company, had no funded debt, had outstanding only common stock held by about 118,000 stockholders, and was paying dividends on its common

PENNSYLVANIA. - Abandonment. - This company has asked the Interstate Commerce Commission for authority to abandon that portion of its so-called Phoenixville branch extending from Devault Station, Pa., to Swedesford Road Station, three miles.

PENNSYLVANIA-READING SEASHORE. Abandonment by the West Jersey & Seashore.-The West Jersey & Seashore and the Pennsylvania-Reading Seashore, respectively, have been authorized by Division 4 of the Interstate Commerce Commission to abandon the so-called Quinton branch and the operation thereof extending from Alloway Junction, N. J., southerly and westerly to Quinton, 4.2 miles.

St. Louis-San Francisco.—Abandonment.-This company has asked the Interstate Commerce Commission for authority to abandon a two-mile segment of its Empire branch extending from the Warrior River to the end of the line, all in Walker County, Ala.

Southern Iowa.—Acquisition and Stock. -This company, which has been recently organized, has asked the Interstate Commerce Commission for authority to purchase the physical properties of the Interurban Electric, belonging to the Iowa Southern Utilities Company of Delaware, and running from Centerville, Iowa, to Mystic, 6.3 miles, and from a junction on the Centerville-Mystic line just outside of Centerville, to Albia, 23.1 miles.

At the same time the new company has asked permission to issue 9,550 shares of common stock of no par value, to be delivered to the Iowa Southern Utilities Company of Delaware in full payment for the property.

SUMPTER VALLEY.—Extension of Bonds. -This company has asked the Interstate Commerce Commission for authority to extend from January 1, 1942, to January 1, 1952, the maturity date of \$418,000 of its first mortgage six per cent bonds.

WINIFREDE.—Deficit Status.—Division 4 of the Interstate Commerce Commission has found that this company did not sustain a decrease in its net railway operating income while under private operation in the Federal control period and is not entitled to the benefits of Section 204 of the Transportation Act of 1920, as amended January 7, 1941.

Dividends Declared

Great Northern.—Preferred, 50¢, payable December 19 to holders of record November 21.
Maine Central.—6 Per Cent Prior Preferred, \$9.00, payable November 1 to holders of record October 25. Payment will cover arrears up to and including July 1, 1937.

Average Prices of Stocks and Bonds

	Oct. 28	Last week	Last
Average price of 20 repre- sentative railway stocks	29.08	28.92	30.05
Average price of 20 representative railway bonds	64.48	65.06	59.85

Railway Officers

OPERATING

- C. C. Clarke, assistant superintendent of the Central Vermont at St. Albans, Vt., has been transferred to New London, Conn., succeeding R. E. Chesney, pro-
- R. L. Tooker, assistant trainmaster on the Illinois Central at Kankakee, Ill., has been promoted to trainmaster at Freeport, Ill., succeeding C. J. Fitzpatrick, who has been transferred to McComb, Miss., replacing A. G. Gebhard, whose promotion to master mechanic-Diesel and electrical equipment at Chicago is reported elsewhere in these columns.
- M. L. Shearer, assistant trainmaster on the Baltimore & Ohio at Garrett, Ind., has been promoted to trainmaster at Columbus, Ohio, succeeding R. B. Emch, who has been promoted to assistant superintendent at Cincinnati, Ohio. William M. Mort, assistant trainmaster at Akron, Ohio, has been promoted to trainmaster, with the same headquarters, succeeding C. T. Williams, who has been promoted to assistant superintendent at Garrett.
- E. L. Golden, assistant superintendent on the New York Central at New York, has been promoted to superintendent of the Electric, Harlem and Putnam divisions, with the same headquarters. J. D. Carkhuff has been appointed assistant superintendent of the Electric, Harlem and Put-nam divisions. J. R. Truden has been appointed trainmaster of the Hudson and Mohawk divisions. F. A. Brazell has been appointed assistant trainmaster of the Electric, Harlem and Putnam divisions.

Ira Davis, superintendent of the Terminal Railroad Association of St. Louis, has been promoted to general superintendent, with headquarters as before at St. Louis, Mo., succeeding J. A. Mathewson, who retired on October 31. Henry Miller, Jr., general yardmaster at East St. Louis, Ill., has been advanced to superintendent, relieving Mr. Davis, and E. G. Yehling, trainmaster of the Eads division, has been advanced to assistant superintendent of the Wiggins Ferry division, replacing J. H. Boyer, who also retired on October 31. J. J. Canda has been appointed passenger trainmaster, succeeding J. M. Perry, retired, and G. J. Hager has been appointed trainmaster of the Eads division, relieving Mr. Yehling. J. A. Mathewson, Jr., has been appointed trainmaster of the Merchants division.

T. M. Cassidy, superintendent of the Northern Iowa Division of the Chicago & North Western, with headquarters at Mason City, Iowa, has been transferred to the Peninsula division, with head-quarters at Escanaba, Mich., succeeding G. Z. Flanders, who retired from active service on November 1. Harry D. Purviance, superintendent of the Sioux City

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THIRTY-SEVEN years ago, the Schenectady Works of the American Locomotive Company built for the Baltimore and Ohio Railroad a new type of engine which railroad men called "Old Maud" because it then was the greatest hauler ever built. It had the distinction of being the first Articulated Locomotive to be operated on an American railroad. This ALCO pioneering achievement was outstanding because this type not only was the most powerful locomotive at the beginning of the century but it gave the railroads a locomotive with twice the power of ordinary engines. Old Maud's performance in service amply demonstrated that its multi-cylinder feature was instrumental in lowering operating costs. From time to time several hundred other articulated locomotives were built for different railroads in the United States and foreign countries. Now, along comes "Big Boy" as a worthy successor, the culmination of a design proved by over a third of a century.

AMERICAN LOCO

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RAILWAY ACE

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MOTIVE COMPANY

November 1, 1941

AGE

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division, with headquarters at Sioux City, Iowa, has been transferred to the Northern Iowa division, relieving Mr. Cassidy. The Sioux City and Iowa divisions have been consolidated under the jurisdiction of Leon B. Kendall, division superintendent at Boone, Iowa, and the new division will be known as the Iowa division. W. S. Alcumbrac, assistant superintendent at Escanaba, has been transferred to Sioux City. John R. Cantwell, assistant superintendent at Antigo, Wis., has been transferred to the Chicago Freight terminal. F. L. Houx, trainmaster at the Fortieth Street yards, Chicago, has been appointed trainmaster at Escanaba and Ralph E. Hamilton, trainmaster for the Peninsula division, has been transferred to the Ashland division, with headquarters at Antigo.

Mr. Flanders entered the service of the North Western in 1891 as a telegrapher on the Galena division and in 1905 was promoted to train dispatcher on that division. He was appointed trainmaster on the Southern Illinois division in 1911 and during the First World War served overseas with the A. E. F. as captain. In 1919 he returned to the North Western as trainmaster on the Wisconsin division at Kenosha, Wis., and in August, 1932, he was promoted to superintendent of the Peninsula division, with headquarters at Escanaba, the position he held until his retirement.

Stanley R. Lamb, whose promotion to superintendent of the Lethbridge division of the Canadian Pacific, with headquarters at Lethbridge, Alta., was reported in the Railway Age of October 11, was born at Edinburgh, Scotland on May 26, 1884, and was educated in Edinburgh. He entered railway service on April 14, 1905, as a rodman on the Canadian Pacific, later serving as resident engineer on construction on the Western lines, both in the field and in the Winnipeg (Man.) office. From November 9, 1914, to July 18, 1919, he was engaged in military service, returning to the Canadian Pacific on the latter date as resident engineer on construction. On July 7, 1920, Mr. Lamb was appointed en-



Stanley R. Lamb

gineer in charge of the Edmonton, Dunvegan & British Columbia and the Central Canada (both now jointly owned by the Canadian Pacific and the Canadian National), with headquarters at Edmonton, Alta., and on November 10, 1926, he was appointed engineer on the Canadian Pacific at Winnipeg. On January 23, 1927, he was promoted to bridge and building master, with headquarters at Saskatoon, Sask., and on September 15, 1927, he was advanced to assistant superintendent at Minnedosa, Man., later being transferred successively to Wynyard, Sask., Kenora, Ont., Weyburn Sask. and Edmonton. His promotion to superintendent was effective October 1.

TRAFFIC

Cecil L. Butler, whose promotion to general freight agent on the Missouri Pacific, with headquarters at St. Louis, Mo., was reported in the Railway Age of October 18, was born at Lovelady, Tex., on August 15, 1898, and entered railway service on April 17, 1920, as a clerk in the local freight office of the International-Great Northern (part of the Missouri Pacific system) at Palestine, Tex. On January 15, 1923, he was transferred to the freight claim department at Palestine



Cecil L. Butler

as claim investigator and on April 7, 1924, he was appointed rate clerk. On January 1, 1928, he was transferred to Houston, Tex., and on July 1, 1932, to St. Louis, Mo. Mr. Butler was promoted to assistant general freight agent at St. Louis on April 16, 1934, which position he held until his recent promotion.

Joseph S. Smith, whose promotion to general freight agent on the Missouri Pacific, with headquarters at St. Louis, Mo., was reported in the Railway Age of October 18, was born at Minneapolis, Minn., on September 23, 1898, and entered railway service on May 10, 1916, as office boy on the Minneapolis & St. Louis at Minneapolis, later being promoted to assistant rate clerk and diversion clerk. From March 1, 1918, to August 1, 1919, he served in the U. S. Army, returning to the M. & St. L. on the latter date as rate clerk at Minneapolis and later being appointed chief diversion and rate clerk. On November 9, 1922, he became traffic manager of the Minnesota Potato Exchange at Minneapolis and on June 16, 1924, he went with the Minneapolis, St. Paul & Sault Ste. Marie as a temporary clerk. Six months later, he returned to the M. & St. L. as chief rate clerk and on June 1, 1925, he went with the Missouri Pacific as chief clerk at Minneapolis. Mr. Smith was transferred to St. Louis as rate clerk



Joseph S. Smith

in March, 1928, and was later advanced successively to chief clerk and assistant general freight agent. His promotion was effective October 15.

Herbert G. Feth, whose promotion to freight traffic manager on the Chicago & Eastern Illinois, with headquarters at Chicago, was reported in the Railway Age of October 18, was born at Cincinnati, Ohio on August 31, 1895, and attended the University of Cincinnati. He entered railway service on August 1, 1916, as secretary to the general freight agent for the Southern at Cincinnati, and the following year he became assistant traffic manager of the Jos. Joseph & Brothers Co., Cincinnati. From 1918 to February 1, 1919, he served in the U.S. Army as a sergeant, and on the latter date returned to railroad service as secretary to the general freight agent for the Southern at Cincinnati. On March 1, 1920, he went with the Erie as secretary to the freight traffic manager at Chicago and six months later he was appointed solicitation clerk at Chicago. Mr. Feth was promoted to commercial agent at Milwaukee, Wis., on March 1, 1922, and on June 1, 1923, he was appointed chief clerk to the freight traffic manager at Chicago. On August 1, 1925, he went with the C. & E. I. as chief clerk to the vice-president, with headquarters at Chicago. On March 15, 1926, he was appointed assistant to the general freight agent, and on December 1, 1929, he was advanced to assistant general freight agent. On February 1, 1941, Mr. Feth was appointed industrial commissioner and on April 16, 1941, he was advanced to assistant to the vice-president in charge of traffic, which position he held until his recent promotion.

Yvon Edward Juge, whose promotion to general freight agent of the Ft. Worth & Denver City and the Wichita Valley, with headquarters at Ft. Worth, Tex., was reported in the Railway Age of October 18, was born at Plaquamine, La., on April 9, 1903, and attended Tyler (Tex.) Commercial College. He entered business as a stenographer for the Crowell & Spencer Lumber Co., at Longleaf, La., later being



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advanced to invoice clerk and sales manager. From 1922 to 1924 he worked in the oil and lumber industries at Ft. Worth and in the latter year he entered railway



Yvon Edward Juge

service as secretary to the general freight agent of the F. W. & D. C. and the Wichita Valley at Ft. Worth, later being advanced successively to cotton clerk, rate clerk and division clerk. On May 16, 1935, he was promoted to assistant general freight agent, which position he held until his recent promotion to general freight agent, effective November 1.

Raymond B. Battey, assistant general freight traffic manager on the Chicago, Burlington & Quincy, has been promoted to general freight traffic manager, with headquarters as before at Chicago, succeeding Lewis C. Mahoney, who retired on November 1. Guy R. Glover, general freight agent, with headquarters at Denver, Colo., has been advanced to assistant general freight traffic manager, with headquarters at Chicago, relieving Mr. Battey, and L. R. Schramm, general agent at Philadelphia, Pa., has been promoted to general freight agent at Denver, replacing Mr. Glover. E. O. Choice, com-



Raymond B. Battey

mercial agent at New York, has been advanced to general agent at Philadelphia, succeeding Mr. Schramm.

Mr. Battey was born in Chicago on

January 9, 1895. Early in his career, Mr. Battey spent a number of years with various commercial concerns, during which time he acquired a business college education. He entered railway service in 1905 as a stenographer in the operating department of the Pennsylvania at Chicago, serving with this company until 1907, when he entered the service of the Burlington as a stenographer and clerk in the passenger department at Chicago. In 1917, Mr. Battey was appointed chief clerk in the office of the vice-president in charge of traffic, serving as office manager in the federal manager's office during the period of federal control of the railroads. In 1919, he was appointed assistant general freight agent in charge of coal traffic, his title being changed to coal traffic manager in 1921. On April 1, 1936, he was promoted to assistant freight traffic manager, with headquarters at Chicago, and on January 1, 1940, he was promoted to assistant general freight traffic manager, the position he held until his recent promotion.

Mr. Mahoney was born at Rock Island, III. on April 10, 1876, and entered railway service on August 11, 1894, as a clerk



Lewis C. Mahoney

on the Chicago, Milwaukee & St. Paul. On November 1, 1906, he went with the Chicago, Burlington & Quincy as a clerk in the general freight department, later serving as chief clerk to the general freight agent and as chief clerk to the assistant freight traffic manager. On October 12, 1917, Mr. Mahoney was appointed assisttant general freight agent, and on January 1, 1925, he was further promoted to general freight agent, with headquarters at Chicago. On January 1, 1936, he was promoted to assistant freight traffic manager of the Illinois-Iowa district, and on April 1, 1936, he was appointed assistant freight traffic manager of the system. Two months later, Mr. Mahoney was advanced to freight traffic manager, with headquarters as before at Chicago, and on January 1, 1940, he was promoted to general freight traffic manager, the position he held until his retirement.

Mr. Glover was born at Denver, Colo., on July 12, 1903. He entered the service of the Colorado & Southern in May, 1918, and in 1920, he resigned to attend the Denver University School of Commerce. He returned to the C. & S. the following

years as a stenographer and later advanced through the position of rate clerk, chief rate clerk and chief of tariff bureau. On



Guy R. Glover

January 1, 1930, Mr. Glover was promoted to assistant general freight agent, with headquarters at Denver and on October 7, 1935, he was appointed assistant general freight agent for the Burlington at Omaha, Neb. On April 16, 1939, Mr. Glover was advanced to general freight agent, with headquarters at Denver.

OBITUARY

Thomas G. Taggart, assistant general passenger agent on the Illinois Central at Chicago, died suddenly of a heart attack on October 29.

Edward Allen Albright, former assistant secretary of the Lehigh Valley at New York, died on October 23 at his home in Roselle, N. J., at the age of 77. Mr. Albright retired in 1936.

C. E. Vorhis, former superintendent of the Clover Leaf district of the New York, Chicago & St. Louis, with headquarters at Frankfort, Ind., who retired from service on January 1, 1937, died at Indianapolis, Ind., on September 19.

James F. Burns, who retired on December 31, 1931, as assistant engineer maintenance of way of the Louisville & Nashville, with headquarters at Louisville, Ky., died on October 26 at his home in Elizabethtown, Ky. Mr. Burns was born at St. Clairsville, Ohio, on November 29, 1869, and graduated from Ohio State University in 1891. He entered railway service in the same year as a draftsman in the office of the chief engineer of the Louis-ville & Nashville. A year later he was appointed masonry inspector on bridge construction and in 1893 he was advanced to assistant engineer on the Memphis line of the L. & N. Mr. Burns served as assistant engineer until 1902, when he was promoted to roadmaster, with headquarters at Lebanon, Ky., later being transferred to Elizabethtown, where he remained until 1913, when he was advanced to assistant engineer maintenance of way, with head-quarters at Louisville. Mr. Burns retained the latter position until his retirement.